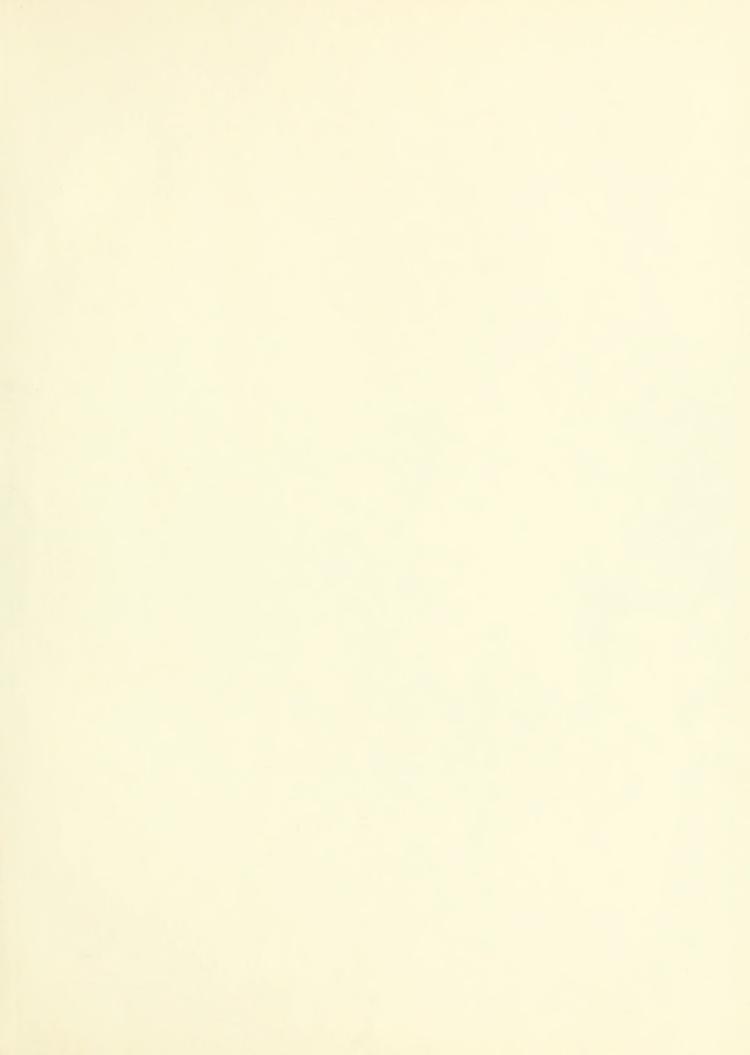


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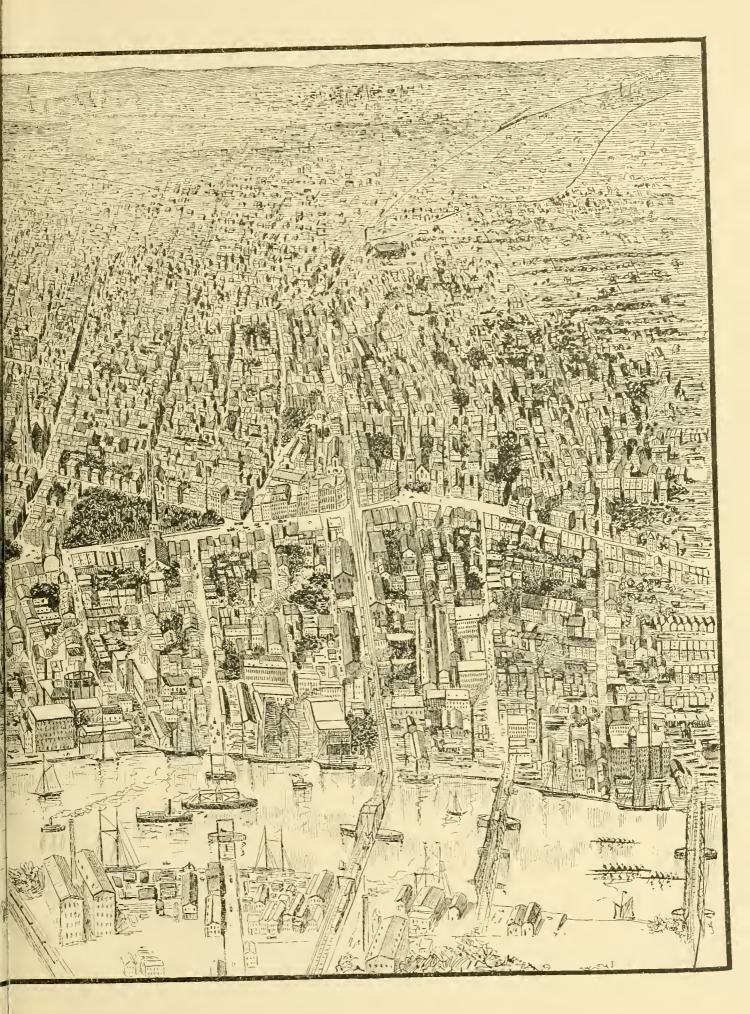












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NEWARK, N. J.,

ILLUSTRATED.

A Souvenir of the City and its Numerous Industries.

PRESENTING IN A COMPACT FORM A BRIEF HISTORICAL SKETCH OF THE SETTLEMENT, GROWTH AND FUTURE INDUSTRIAL AND COMMERCIAL IMPORTANCE OF THE CITY OF NEWARK.

AND CONTAINING PROFUSE ILLUSTRATIONS OF ITS GREAT FACTORIES.

BEAUTIFUL RESIDENCES, VARIOUS POINTS OF INTEREST,

PORTRAITS OF PROMINENT CITIZENS, ETC.

DESIGNED BY PETER J. LEARY.

ISSUED BY APPROVAL OF THE BOARD OF TRADE.

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INTRODUCTION.



HE designer, in the projection of this work, had in view a volume which should give the country, at an important time in its industrial affairs, some idea of the relation which Newark bears to the manufacturing world. The Columbian World's Fair was then being actively canvassed, and it was thought essential that the volume should be in time for that important industrial event. A Newark mechanic himself, he felt a personal pride in designing and producing something that would bear inspection and warrant approval. How well he has succeeded must be left to the judgment of the manufacturers of Newark, and those allied with her industries. In the prosecution of the work there have been

impediments not within the control of the designer, and there were vexatious delays which were unavoidable. That the project has been earried to completion must be credited to the generosity of the business men of Newark, without whose material assistance the work could not have been finished.

The work presents a clear and complete view of the City of Newark, as it exists to-day, in all its vast and varied interests and industries. A brief historical sketch of the city is given, and an account of the humble origin and surpassing growth of the manufacturing industries which have made the city great, wealthy and famous; but the chief purpose of the work is to reverse the ordinary methods of history, and dwell more largely upon the Present, with its powers and possibilities, than upon the dim and meager details of the Past. From this view of the Present may be gathered, it is believed, some slight idea of the vastness and the glory of the Future.

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(LAST, INDER THE OLD SYSTEM.)

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Strats and Highway Ald Stainsby, Fitzsimmons, McCormack, Lynch, Parker, Henderson, Burgesser, Huegel, Ryno, Arnold Larue, Hausman, Roehrich, Ulrich,

Secrit and Dramage Ald. Huegel, Kane, Seiler, Ely, Smith,

Police Ald. Lynch, Ryno, Burgesser,

hire Depirtment-Ald. Kane, Olyaney, Ely.

Poor and Alms-Ald. Olyaney, Furman, Stainsby, Lynch,

Public Lighting - Ald, Ryno, Sciler, Stainsby, Arnold, Larne. Public Markets Ald. Henderson, Johnson, Goeller, Kane.

Public Grounds All McCormack Smith, Hausman.

Public Buildings Ald Burgesser, Harrigan, Ulrich, Lynch,

Public Health Ald, Seiler, Schaefer, Wangner,

Public Baths-Ald. Roehrich, Hausman, Larue. Printing—Ald. Larne, Dusenberry, Fitzsimmons. Stationery - Ald. Ely, Parker, Olvaney. Licenses-Ald. Fitzsimmons, Ryno, Seiler. Legislation-Ald. Harrigan, Johnson, Henderson. Assessments-Ald. Parker, Goeller, Freiensehner. Elections Ald. Schaefer, Wangner, Harrigan. Crosswalks-Ald. Wangner, Smith, Furman. Railroads and Franchises - Ald. Dusenberry, Roehrich, McCormack.

City Home.-Ald. Smith, Shaefer, Huegel. Water Supply-Ald. Johnson, Furman, Schaefer, Bioren, Bur

gesser.

Bridges-Ald, Ulrich, Wangner, Henderson. Hospitals-Ald. Ely, Hausman, Schaefer. Wharves-Ald. Bioren, Smith, Heller. Sidewalks-Ald Heller, Hausman, Olyaney.

Public Schools-Ald, Goeller, Parker, Ely.

CITY OFFICERS.

City Counsel	William B. Guild
Assistant City Counsel	Samuel J. Maedonald
City . Lttorney	James A. Dempsey
Comptroller	James F. Connelly
City Clerk	William E. O'Connor
Assistant City Clerk	Peter J. O'Toole
	.Fernando C. Runyon
Receiver of Taxes	Martin Issler
City Surveyor	Ernest Adam
Superintendent of Fire Departmen	
Chief Engineer of Fire Departmen	t Robert Kiersted
Superintendent of Fire Alarm	A. Bosch
Overseer of the Peer	William A. Baldwin
Clork of Centre Market	George Hermon
Judge of First Praint Court	
Judge of Se and Provint Court	. Redmond P. Conlon
Judge of Third Precinct Court	
Suprintendent Pla	William H. Brown
(Tie of Det tres	Henry Hopper
Police Surgeen	J. Henry Clark
But ding Inspector .	D. H. Boughner
M ter Inspector	. August T Schneider
K ef 1 of Pulla Clecks.	Charles Freeman
Trans Inspector	Jan es F e ning
E is Institution	. George Rabenstein
Seste to With the and Merson's	. II F. Geisacuner
Health) "	Dr. Charles Leh bach
Substitute to the Har	. Frederick No an
$IIms\ IIi\ as\ I$ ii ,	Dr. C. L. Bradin
Sufficient of the In 1889	Joseph Sanuels

Superintendent of Public Schools William N. Barringer Supt. Street and Water Commissioners Charles Marsh Henry Negels Milk Inspector J. R. Bradshaw Janitor City Hall. . Board of Assessment and Revision of Taxes-Philip Lowy, Marcus S. Richards, Paul W. Roder, Owen F. Conlon, R. Heber Breintnall, and John J. Berry, Secretary. Commissioners of Adjustment of Newark Taxes - Harrison Van Duyne, James L. Hays, Theodore Hewson.

Commissioners of the Sinking Fund-Robert F. Ballantine, Frederick Frelinghuysen, Frederick II. Teese, Mayor and Comptrollor, Ex-officio.

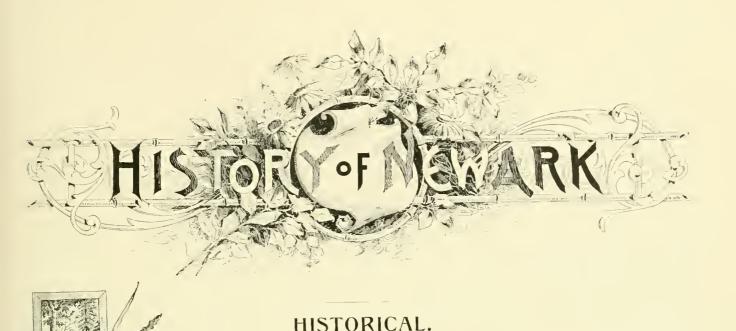
Board of Street and Water Commissioners - Dr. Hugh C. Hendry, President; Thomas Harlan, Ferdinand A. Hahn, Reuben Trier, Samuel Klotz.

Trustees of City Home-Mayor Joseph E. Haynes, President; H. T. Dusenberry, Treasurer; C. M. Harrison, Secretary and Superintendent; George W. Vernet, J. B. Richmond, M. D., Dennis F. Olvaney, E. W. Crane, E. J. III, M. D.

Board of Fire Commissioners-Edward Shickhaus, President; James Van Houten, Henry E. Baker, Hugh Kinnard, and H. H. Brown, Secretary.

Board of Police Commissioners - John Strahan, President; Henry Dilly, Osceola Currier, Edward Maher, Joseph M. Cox, Secretary.

Board of Encire-Herman Schalk, President; Peter Grace, A.



"O UR Towne upon ye Pasaick River," which is to day the great manufacturing city of Newark, was not founded by manufacturers or mechanics, but by farmers. The little company of "planters," as they styled themselves, who voyaged hither from the province of Connecticut,

projected nothing more ambitious than a plantation, to use the language of the time, where they might reap the harvests and gather the fruits of independence, and "provide for their outward comfortable subsistence and their souls' welfare." The point on the Passaic at which they dropped anchor must at that time have presented a marvelously picturesque appearance. The river was then, in very truth, a sylvan stream. Its sinuous course rambled, as it were, through the deep woods, which, but for its silver trail, had been well-nigh pathless. Above the landing place of the pioneers it emerged into the open, and revealed the gentle slope of its southern bank, which rose in a succession of leafy terraces crowned by the more thickly wooded hills beyond. To the east lay a broad expanse of meadow land, losing itself in marsh as it neared the bay the voyagers had just left behind. Here were meadow and upland, valley and hillside, a fertile soil, abundance of water, good climate, the promise of sure and rich rewards for their labors. It was almost an ideal spot for the projected plantation, and here, accordingly, the adventurous planters brought their voyage to an end.

They came, these good men of New England, not seeking an asylum for religious liberty, but rather a stricter habitation than that from which they had come forth. Their discontent at home had been rather political than religious. Upon the restoration of Charles II, he had granted a new charter, by which the colonies of New Haven and Connecticut had been consolidated into one province. The laxity of the restoration period was not wanting in the new charter. The government of the province and its various settlements was no longer confined to the saints exclusively, but political privileges and a voice in affairs were extended to the ungodly and unregenerate. This to the more pious ones was an abomination and offense. As no good could come of remaining under so ungodly a dominion, the good people of Milford, Branford and Guilford determined to make the only effective protest

open to them. They sought a new home where they might found such a piously governed community as God would approve and bless. Their ideal was a sort of theocracy, modeled as nearly as might be on Mosaic lines, in which God should be the Ruler and the saints the instruments of His will.

Their first efforts to obtain a new settlement were made as early as November, 1661, in which month they opened negotiations with Peter Stuyvesant, Governor of the New Netherlands, for permission to locate in his province. The negotiations were necessarily slow, but seem to have dragged needlessly, and finally were almost practically abandoned, when the grasping and enterprising spirit of the English government at home put an emphatic period to all treaty with the sturdy Stuyvesant, and opened up a new avenue for those who wished to leave Connecticut behind.

Determined to oust the Dutch from the New Netherlands, Charles II, made his royal charter granting that province to his brother James. Duke of York. Immediately a small fleet was sent to America to put the prince into formal possession of his new province. The slow and sleepy Hollanders, lazily luxuriating in the rich town of New Amsterdam, were suddenly surprised and awakened by the appearance in the bay in the summer of 1664 of the English fleet. The English demand for immediate surrender found poor Stuyvesant utterly unable to defend himself, and finally, on August 27, 1664 (O. S.), a formal surrender of the New Netherlands was made.

But the avaricious Duke, eager to profit by his brother's princely gift, did not wait for possession to parcel out his new province. On June 23 and 24, 1664, he made grant to John, Lord Berkeley, and Sir George Carteret of "All that tract of land adjacent to New England, and lying and being to the westward of Long Island and Manhattan Island, and bounded on the east part by the main sea and part by Hudson's River; and hath upon the west Delaware Bay or River; and extending southward to the main ocean as far as Cape May, at the mouth of Delaware Bay; and to the northward as far as the northernmost branch of the said bay or river of Delaware; which is in 41 degrees and 40 minutes of latitude and crosseth over thence in a straight line to Hudson's River in 41 degrees of latitude; which said tract of land is hereafter to be called Nova Cæsaria, or New Jersey," etc., etc.

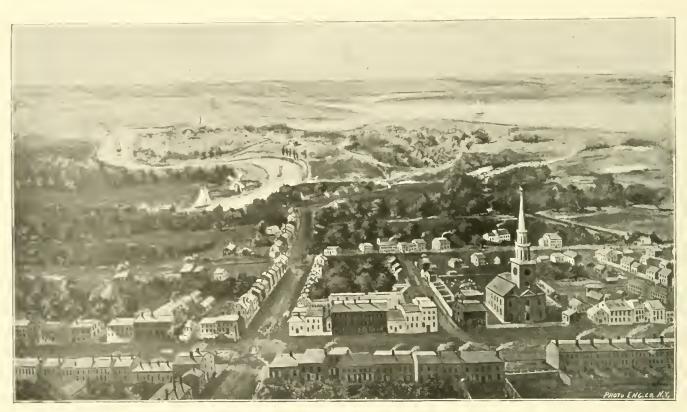
The new proprietors lost no time in taking possession of their territory. They appointed Philip Carteret, brother of Sir George,

Its (rovernor and promount his hands a constitution for the government of the territory. These preliminaries arranged, Governor Carteret set sail for New Jersey, and arrived at his new domain in August, 1665. Soon after he sent messengers into New England to make known the concessions of the "Lords proprietors," and to invite settlers to take up lands in New Jersey under the very liberal terms set torth in those remarkable and advanced articles.

Here was the opportunity long sought for by the discontented ones of Milford, Branford and Gulford, and they made haste to embrace it. The rich of Milford appointed a committee to visit the new province and learn of the glowing representations made of it were true. Their committee came, saw the country, interviewed the Governor, and returned to report favorably all they had seen and heard. The necessary grant was obtained from Governor Carteret, and in the Spring of 1000 the first little band of settlers, numbering about thirty persons set out from Milford for the new

bareing a west line for the south bounds, which said great creke is commonly called, and known by the name Weequachick, on the West Line backwards in the Country, to the foot of the great mountaine called Watchung, being as is Judged about seven or eight miles from Pesayak towne; the said mountaine as Wee are Informed, bath one branch of Elizabeth towne River running near the above said foot of the Mountaine; the bounds Northerly, viz.: Pesayak river reaches to the Third River above the towne, ye river is called Yauntakah, and from thence upon a North West line to the aforesaid Mountaine."

The consideration given the Indians was complex and characteristic of the parties and the time. It is thus set forth in the deed: "Fifty double-hands of powder, one hundred barrs of lead, twenty Axes, twenty Coates, ten Guns, twenty Pistols, ten Kettles, ten Swords, four blankets, four barrels of beere, ten paire breeches, tifty knives, twenty howes, eight hundred and fifty fathem of wampun, two Ankors of liquers or something equivolent, and



VIEW OF NEWARK, N. J., IN 1710, TAKEN FROM AN OIL PAINTING.

plantation. In May the adventurers arrived at their destination and proceeded to debark and enter into their new possessions. But here they found other proprietors to deal with, not so courteous or hospitable as the diplomatic Governor. Indians appeared and forbade their landing, notifying them of the claim to ownership of these lands by the Hackensack tribe. New negotiations had to be entered into with the Indians, and the thrifty pioneers did not allow their plety to prevent their obtaining a very good bargain from the red men.

The Indian deed, which bears date July 11th, 1667, or more than a year after the advent of the settlers, conveys to the latter "a certain tract of land, upland and meadows of all sorts, whether swamps, rivers, brooks, springs, fishings, trees of all sorts, quarries and mines, or metals of what sort soever, with full liberty of hunting and fow ing upon the same, excepting liberty of hunting for the above said proprietors that were upon the upper commons, and of ushing in the above said Pesayak River, which said tract of Land is bounded and limited with the bay eastward and the great River Pesayak, nort oward, the great creke or river, in the meadow running to the head of the cove, and from thence

three troopers Coates." This deed was duly recorded in the East Jersey Records March 2, 1676-7, Lib. 1, fol. 69.

Very shortly after the landing of the settlers their first formal meeting of which any record remains was held. The minutes of this meeting recites that "In the Province of New Jersey, near to Elizabeth Town, and the Town Plotts on Passaic River, made choice of by friends from Milford and other neighboring plantations thereabouts from New England, on the twenty-first day of May, one thousand six hundred and sixty-six, the above-mentioned persons had a meeting, together with the agents sent from Guilford and Branford, to ask on behalf of their undertakers and selves with reference to a township or allotments, together with friends from Milford," etc. This minute would seem to indicate that the pioneers had been followed by "the agents sent from Guilford and Branford," and that already some allotment of "Town Plotts" had been made. The desires of the "agents" were granted, and at this meeting it was agreed "that the agents from Guilford and Branford do take upon and hold till June, in the year one thousand six hundred and sixty-seven, and fully to dispose of, provided it be possessed, built upon and settled according to order, for their associates, for themselves, theirs and such as they shall send, provided that these last bring due testimonials to the committee there for the town, and they approve of them, lots, allotments in every division, equally priviledged, as far as may be with the rest of the planters, then being or to be," etc., etc.

This accord and agreement being reported to the men of Branford, they, in their turn, held a meeting October 30, 1666, and adopted and subscribed the following minute:

OCTOBER 30, 1666.

"At a meeting Touching the Intended design of many of the inhabitants of Branford, the following was subscribed:

Deut., 1-25. Within our Town upon Pasaick River in the Province Exad., 18-31. Deut., 17-15. Some or other of the Congregational Churches, nor shall any but such be chosen to Magistry or to Carry on any part perem. 36-21. of Civil Judicature, or as deputies or assistants, to

Such was the simple but rigid faith of the Branford pioneers, and such was their pious and watchful care, that the faith once delivered to the saints, as they believed, should be preserved in its pristine purity. Their watchful and uncompromising piety found full accord with the settlers who had preceded them, and a holy joy filled the breasts of the "present inhabitants."

Upon the reception of this minute and accompanying letters from the inhabitants of Branford, the settlers held a meeting in November and assented to the stipulations of the Branford men, and at a subsequent meeting held June 24, 1667, they indorsed upon the Branford minute their acceptance of its terms, as follows:

"And upon the Reception of their Letters and Subscriptions the present Inhabitants in November following declared their consents and readiness to do likewise; and at a meeting the twenty-fourth of the next June following, in 1667, they also subscribed with their own Hands unto the two fundamental agreements Expressed on the other side their names, as follows:











VIEWS OF NEWARK, N. J., IN 1840.

have power to Vote In establishing Laws, and making or repealing them, or to any Chief Military Trust or Office. Nor shall any but such Church Members have any vote in any such elections; Tho' all others admitted to be planters have Right to their proper Inheritance, and do and shall enjoy all other Civil Liberties and Privileges, According to all Laws, Orders, Grants, which are or hereafter shall be made for this Town.

"2d. We shall, with Care and Diligence, provide for the maintenance of the purity of Religion professed in the Congregational Churches. Whereunto subscribed the Inhabitants from Branford:

"JASPER CRANE,
ABRA PIERSON,
SAM'L SWAINE,
LAURANCE WARD,
THOMAS BLACTHLY,
SAMUEL PLUM,
JOSIAH WARD,
SAMUEL ROSE,
THOMAS PIERSON,
JOHN WARDE,
JOHN CATLING,
RICHARD HARRISON,

Inhabitants from Brani Ebenezer Canfield, John Ward, Senior, Ed. Ball, John Harrison, John Crane, Thomas Huntington, Delivered Crane, Aaron Blacthly, Richard Laurance John Johnson, Thomas his Lyon." " ROBERT TREATT, OBADIAH BRUEN, MATTHEW CAMFIELD, SAMUEL KITCHELL, JEREMIAH PECKE, MICHAEL TOMPKINS, STEPHEN FREEMAN, HENRY LYON, JOHN BROWNE, JOHN ROGERS, STEPHEN DAVIS, EDWARD RIGS, ROBERT KITCHELL, J. B. X BROOKS, ROBERT V LYMENS,
mark his
FRANCIS F LINLE, DANIEL TICHENOR, JOHN BAULDWIN, SEN., John Bauldwin, Junr., JONA. TOMPKINS,

GEORGE DAY, Thomas Johnson, JOHN CURTIS, EPHRAM BURWELL, ROBERT R DENISON, NATHANIEL WHEELER, ZACHARIAH BURWELL, WILLIAM CAMP, JOSEPH WALTERS, ROBERT DAGLESH, HAUNS ALBERS, THOM. MORRIS, HUGH ROBERTS, EPH'M PENNINGTON, MARTIN TICHENOR, John Browne, Jr., JONA. SEARGEANT, AZARIAH CRANE, SAMUEL LYON, JOSEPH RIGGS, STEPHEN BOND,"

It will be noticed that the signatures of "the present inhabitants" number forty-one, showing that if the pioneer bark in May, 1666, bore only about thirty persons, as all the historians agree, to the new plantation, the colony had in its first year of existence grown amazingly. Each signer doubtless was the head of a family, and if these families averaged only three persons beside the head, then the population of the colony in June, 1667, must have numbered about 164, a fivefold increase in one year.

It is probable that the new settlement was at first named Milford, although no name at all appears in the earlier documents and records of the town. It is said by the historians of the town that on the arrival of the settlers from Branford the name Milford was dropped and the name of Newark conferred on the new town, in honor, it is surmised, of Rev. Abraham Pierson, the pastor of the Branford people and the chosen pastor of the new settlement. Be this as it may, the first mention of any name in the town records occurs under date of January, 1668, when it is recorded

"any new Inhabitant shall arrive or come into Town to inhabit with us; it is agreed and ordered that he or they from Time to "Time shall in all Respects subscribe and enter into the same "engagements as his Predecessors or the rest of the Town have "done, before he or they can or shall be accounted Legal Inhabitants in our Town, or have * * * * Title to their Lands or "Possessions therein."

For many years the citizens, in town meeting, settled the mundane affairs of the church, agreed upon calling ministers, fixing their salaries, preserving order and decorum during worship, etc., etc. As late as the year 1738 the entry appears, "Samuel Alling and John Crane was appointed to order the ringing of the bell and sweeping the Meeting-House * * * it was also voted that Hannah Shingleton should sweep the Meeting-House, provided she sweep it clean and for the same Wages as it was done for last year." And, still later, in 1755, we find, "Samuel Parkhurst and Samuel Morris Collectors of Mr. Burr's [the clergyman] Rate for



VIEW ON MILITARY PARK AND PARK PLACE, LOOKING NORTH FROM BROAD STREET.

that "Mr. Crane and Mr. Treatt are chosen Magistrates for the Year Insuing for our Town of Newark." The chronicler, with the taciturnity of that time, fails to tell how or why this name was chosen in preference to any other, and it remains only a conjecture that it was chosen in honor of Mr. Pierson, who had officiated or been ordained at Newark-on-Trent.

The close alliance of church and state in the new community, indeed, the actual and complete union of the two, is shown in the "fundamental agreements" to which every settler was obliged to subscribe as a condition precedent to holding his lands, and also in the town records for many years thereafter. We find this, for example, in the "fundamental agreements" "That "it is fully and unanimously agreed upon as a Condition upon "which every one doth reckon and hold his Lands and accommodations in the Town, viz: that they will from Time to Time pay or cause to be paid yearly in their full proportions equally, "to the Maintenance & allowance agreed upon for the upholding "of the settled Ministry and preaching of the Word in our Town," etc. Also the following, in respect to new-comers: "Item, it "was ordered and agreed upon, in case of changes of Lands * * *

the year ensuing." But the strict requirement of the "fundamental agreement" that only church members should attend and vote at town meetings did not remain so long in force. So early as March 1, 1677, we find it recorded, "It is voted as a Town Act" that all and every Man that improves Land in the Town of "Newark, shall make their appearance at Town Meetings and

"there attend to any Business as shall be proposed, as any of the "Planters do, and liable to any Fine as others are in Case of their "absence at the Call, or a whole Day, or going away before the

"Meeting break up, and also that the Clerk is to set their Names "in a List and Call them as others are called."

The first hundred years of the existence of the little town was a period of peace and prosperity. There was little or no trouble with the neighboring Indians, the sound policy of the first settlers and their honorable dealings with the red men having favorably impressed the latter and made them the friends of the white men. There were, indeed, periods of alarm when there were rumors of general uprisings of the savages, and when the prudent citizens bore their arms to the meeting-house and appointed sentries to bear watch and ward during the hours of worship, but

there appears to have been no conflicts with their supposed foes. Only once was there a real prospect of serious trouble during this period, but this was averted by the prudence and sagacity of the leaders of the town. In 1673 the Dutch retook New Amsterdam, which they now named New Orange, in honor of Prince William of Orange. The Dutch Governor issued his proclamation commanding all the settlers within the New Netherlands—which, of course, included New Jersey—to return to their allegiance to the States-General, guaranteeing them in all their rights provided they should take the oaths and submit themselves to the old regime.

The townsmen of Newark were evidently not to be perturbed by the vicissitudes of earthly powers and dominions. They owed their first allegiance to their Heavenly Ruler, and so long as they were not disturbed in their homage and fealty to Him, it mattered little to them who His earthly deputies might be. Their concern was not politics, but religion. Accordingly, but a few days after

the attempted usurpation of Governor Andruss could extort from the people more than the briefest notice. Almost contemptuously they returned to the fiery Governor's demand that they should recognize his authority, their calm answer: "The Town being " met together the 29th of March, 1679-50, and give their positive "Answer to the Governor of York's writ, (viz): That they have "taken the Oath of Allegiance to the King and Fidelity to the " present Government, and until they have sufficient Order from "his Majesty we will stand by the same." Their thoughts were chiefly set upon the orderly regulation of their own immediate affairs, the preservation of religion and morality in their little community, and the godly up-bringing of their young; to political affairs without they gave only the hastiest and most impatient consideration. But the care they took in the minutest details to promote and secure goodly behavior among themselves is shown, for example, in a vote of the town passed February 25, 1680: "To prevent disorderly Meetings of Young People at unseason-



VIEW ON MILITARY PARK AND PARK PLACE, LOOKING EAST FROM BROAD STREET.

the raising of the Dutch standard at New Orange, and the publishing of the Dutch General's proclamation, at a town meeting held August 4, 1673. "It was agreed that we should join with the "rest of the Province to agree with the General at N. Orange, "to have a priviledged County between the Two Rivers Pasaick "and Araritine, or with as many as will join with us on that "account, then to desire what may be necessary for us in our "Town."

The military occupation of New Orange by the Dutch continued until the end of October, 1674, and during this period of fifteen months the good townspeople of Newark placidly carried on their town affairs, quietly ignoring the fact that war existed between their mother country and Holland, and submitting themselves in all things necessary to the authorities at New Orange. Already the calm indifference of the settlers to the political affairs and vicissitudes of the European powers is noticeable and significant.

From the re-surrender of New Orange to the English, and the re-establishment of the authority of the Lords Proprietors, down to the period of the Revolutionary War, events were few and unexciting in the life of the little town on the Passaic. Not even

"able Times, it is voted as a Town Act, that no Housekeeper or "Master of a Family, shall harbour or entertain any Person or "Persons in the Night after Nine o'clock, or at other unseasonable

"Times, (extraordinary occasions excepted); nor shall they suffer "them disorderly to meet at any Place within their Power, to

"spend their Time, Money or provisions inordinately, in drinking, "gaming or such-like; nor shall they suffer any Carriage, Conference or Council which tends to corrupt one another. All

" such Persons so transgressing shall be liable to such fines the " ${\rm Authority\ shall\ think\ fit.}$

The Town Records from 1775 to 1783 do not show any evidence of the existence of the War of the Revolution. The town meetings were held regularly and the public business transacted as placidly and orderly as if the liberties of the nation were not trembling in the balance. Some effort has been made to show that the citizens of Newark suffered severely by the incursions and depredations of the British soldiery, and doubtless they failed not to experience some of the ravages of the war; but it is no doubt equally true that they were less disturbed than the citizens of most of the other patriot towns. In the year 1774 the town

raised \mathcal{L}_{120} for the support of the poor; in 1776 the amount voted was \mathcal{L}_{110} ; in 1781, \mathcal{L}_{250} ; and in 1784, \mathcal{L}_{250} . The increase in the amount raised for the poor does not necessarily mean that the latter had grown so much more numerous, but may have been due to the fact of the depreciation of the currency and the rise in prices of all commodities. At all events it is pretty conclusive evidence that the community in general had not suffered so very severely from the war. And Dr. McWhorter, who is excellent authority, says that the town "soon recovered from its damages, increased fast in its population, and quickly began to flourish, especially in its manufactories."

From the close of the War of Independence the growth of the town appears to have been steady and continuous, if not rapid and remarkable. Few incidents occurred to disturb the peaceful and happy monotony characteristic of the life of rural communities; but from year to year this God-fearing people quietly and stead-fastly performed their various tasks, added to their slender store

census taken three years later, was only about 6,000. Comment is needless, unless it be worth while to remark that thus early Religion seems to have acquired the habit of losing sight and speech as soon as she crosses the threshold of Politics. The majority was for Newark, but the election was subsequently set aside by the Legislature upon the clear and unmistakable proof of frauds perpetrated at the polls. Newark did not, however, lose the county seat. A distinguished and public-spirited citizen, Judge Pennington, presented a site within its limits for new county buildings, and these were built and finished in the year 1812.

The growth of the town naturally rendered the old government by town meeting inconvenient and insufficient. Agitation was begun in 1832 looking toward the incorporation of the town as a city, and for its more easy and efficient government. Finally, in 1836, the Legislature passed a charter for the city of Newark, which was adopted by a popular vote of the citizens at an election held for the purpose, and in the month of April, 1836, the city



VIEW ON WASHINGTON PARK AND WASHINGTON STREET

of wealth by industry, frugality and thrift, worshiped God and were content.

One of the most exciting events in the history of the town subsequent to the Revolution was the election in 1807 to decide whether the county seat should be continued in Newark or should be removed to some other site, its principal rival being the ambitious and jealous town of Elizabeth. An act of the Legislature was passed providing for the submission of the question to a vote of the people of the county. February 10, 1807, was fixed for the first day of the election, which was to continue three days. Single women and widows were permitted to vote. Despite the religious character of the people of both communities, the election seems to have been characterized by every species of fraud and corruption. Ballot-box stuffing, repeating and impersonation; every description of fraud was practiced by young and old women and men. A sufficient idea of the character of the election may be gathered from one fact alone. The total vote cast in Newark was 5, 039; the entire population of the town, as shown by the

government was fully organized, with William Halsey, Mayor; Oliver S. Halsted (afterward Chancellor of New Jersey), Recorder; Joseph N. Tuttle, Clerk; William A. Meyer, Treasurer; Elias H. Van Winkle, City Surveyor, and James Keene, Street Commissioner.

Since its incorporation the city of Newark has advanced with rapid and unceasing strides. Its population in the intervening half-century has multiplied tenfold; its manufactures have increased maryelously, not only in volume but also in diversity; its prosperity has been sound and healthy as well as vast, its periods of depression few and brief. It has achieved a position in the very first rank of the manufacturing cities of the world; its situation and facilities are unequalled; its reputation for quiet and order and its credit are unsurpassed; for healthfulness as a dwelling place, for moderation in its taxation, for educational, religious and social advantages, it is all that can reasonably be desired. Resting upon so broad, firm and unyielding a foundation, its continued prosperity is assured.

THE CITY GOVERNMENT.

THE first government of Newark was essentially religious. It was a combination of the theocracy of the Jews with the democratic town meeting of New England. All affairs of the settlement were conducted, all officers and magistrates chosen, by the entire body of citizens in town meeting assembled; which was democracy, pure and simple; but, in the "fundamental agreements," citizenship and suffrage were restricted to the saints: "none shall be admitted freemen * * * but such Planters as are members of some or other of the Congregational churches, nor shall any but such be chosen to Magistracy * * * nor shall any but such Church Members have any Vote in any such election." Here was the most complete union of church and state ever established since the Mosaic dispensation, and this

and allow the unsanctified to come in and have a voice in the government.

The government of the town by town meeting continued in full force, without any change, until 1833 when, by act of the Legislature, the town was divided into four wards, known, respectively, as the "North," "South," "East" and "West" wards. The town government by wards continued for three years longer, until, in 1836, a charter was granted by the State and the town became a city. This charter was soon found to be inadequate, and supplement after supplement was obtained from the Legislature until their number became inconveniently large and confusing. Accordingly, in 1854, the Common Council appointed three commissioners to revise and codify the charter and the supple-



VIEW ON LINCOLN PARK AND WASHINGTON STREET,

continued in its complete integrity until March 1, 1677, when it is recorded that "It is voted as a Town Act that all and every Man that improves Land in the Town of Newark shall make their appearance at Town Meetings, and there attend to any Business as shall be proposed as any of the Planters do." Again on October 2, 1683, "It is agreed by vote that all and every Person possessed of Lands in the Town of Newark shall have their Names put into the List to be called at Town Meetings, from Time to Time."

The reason for thus relaxing the stringency of the "fundamental agreements" and allowing the profane to come in and join with the saints in the direction of the temporal affairs of the town seems to have arisen from the carelessness and negligence of the saints themselves. Surprising as it may seem, it was difficult to get them to attend to their solemn duties and to exercise their high privileges. Even the imposition of fines for non-attendance at town meetings or for dilatoriness did not seem to arouse the saints to the importance of their political privileges, and finally, only eleven years after the settlement of the town and the solemn signing of the "fundamental agreements," it became necessary, to insure the proper conduct of public affairs, to open the doors

ments thereto. These commissioners submitted their draft of the revised charter to the Common Council in February, 1855. It was then considered carefully by a joint committee of the Common Conneil, and of the citizens, and amended by them in several important particulars. After much consideration and many delays the revised charter received the sanction of the Legislature, and was approved by the executive of the State March 20, 1857.

Under the revised charter the government of the city was vested in a Mayor and a Common Council, or Board of Aldermen, consisting of two aldermen chosen by the citizens of each ward, the number of wards at the time of the adoption of the revised charter being but eleven. In addition to the Common Council, a Board of Education was provided for, which was to have entire charge and control of the public schools of the city, but subject to the Common Council in the matter of appropriations. The government established by this charter was very simple, and was soon found insufficient for the rapidly growing needs of the city. In 1850 a supplement was passed establishing the office of Receiver of Taxes, and also providing for a Sinking Fund to meet the city's bonded indebtedness as it should fall due. In 1860 the

city was authorized to purchase the property, rights and franchise of the Newark Aqueduct Company, and the Newark Aqueduct Board was established for the management and control of the water supply of the city. In 1866 the Board of Assessment and Revision of Taxes was constituted for the more systematic and effective assessment of taxes. This board continues to be of the same number, duties and powers as when first established, but its members are now all appointed by the Mayor. In 1873 the Department of Finance was established, the chief officer of which to be Comptroller of the city. This department remains substantially the same in scope and powers as originally constituted. A Board of Excise Commissioners was established in 1875, and this board also remains, as to authority and jurisdiction, substantially as at first constituted.

In 1891 the most sweeping and far-reaching change in the city government was proposed by an Act of the Legislature providing for the appointment in each of the cities of the first-class (Newark and Jersey City), of a Board of Street and Water Commissioners. This board, it is provided in the law, shall be composed of five members and is clothed with very extensive powers. It is to have entire control and management of the Water Department, the Street Department, all sewers and drains, in short, all the public works of the city. Proceedings have been begun and are still pending in the Supreme Court to test the constitutionality of the act constituting this board, and it is practically at a stand until the decision of the court shall be announced. Since the foregoing was written, the Supreme Court has decided the act constituting the Board of Street and Water Commissioners to be constitutional and the board has assumed and exercises all the powers conferred upon it by the new law.

The other departments of the city government are the Health Board, which, under recent legislation, has very extreme powers the Trustees of the City Home, a reform school for boys and girls the Trustees of the City Hospital, and the Trustees of the Free Public Library, a most excellent institution which is giving unqualified satisfaction.



VIEW ON CLINTON AVENUE AND HIGH STREET.

THE CHURCH HISTORY OF THE TOWN.

THE historian of Newark must needs give much attention and devote considerable space to the history of the churches of the city. So closely, as has already been shown, were the temporal and spiritual interests of the town interwoven and almost identified, that the one cannot be traced and set forth without following and displaying the other. In the infancy of the town the two were twins, fond, affectionate and constant in their companionship. It was many years before one outstripped the other in physical growth and found his attention and his activities absorbed by his rapidly growing prosperity and possessions, and the devotion of the two loving twins became formal and strained if not altogether cold and lifeless.

The history of the church in Newark antedates that of the town by more than a score of years. It really begins in Branford, in 1644, when it had "its proper organic origin"—as good Doctor Stearns styles it. The Rev. Abraham Pierson, the first pastor of the church, came to Boston from England in 1639. He was born in Yorkshire—in what year is uncertain—and was graduated at the University of Cambridge in 1632. After being ordained—episcopally, it is supposed—and preaching a few years in his native country, he decided, for reasons now unknown, upon emigrating to New England and casting in his lot with the Puritans there. He joined the church at Boston, and appears to have been stationed immediately, or very soon thereafter, at Lynn. In 1640 some of the residents of Lynn, "finding themselves straitened," as the quaint language of the time puts it, determined to remove to less "straitening" habitations. They removed to the east end of Long Island, and there founded the town of Southampton. They had been organized as a church before leaving Lynn, and had chosen Mr. Pierson as their minister, and he,

therefore, accompanied them to their new settlement. But in the year 1644 he and some of his flock, being dissatisfied because their little colony was placed in the jurisdiction of Connecticut, removed to the town of Branford. Here he organized a new church, embracing inhabitants of Branford with others from Weathersfield, who united with them, and here the church history of the church of Newark really begins; for when, in 1667, the people of Branford resolved to join those of Milford in their "towne upon the Pasaick," they took with them their pastor and their entire church organization. Dr. Stearns, the historian of the "First Church," says: "Indeed, the old church in Branford, organized there twenty years earlier, was probably transported bodily, with all its corporate privileges and authorities. Its old

forth upon a new, and it since has proved, by far the largest portion of its career."

Mr. Pierson was a strong as well as godly man. His influence upon the new community was very great and largely determined its character and career. He was a learned man, still fond of books and study in these wilds. His library numbered four hundred and forty volumes, a goodly library for the most refined centre of the New World, and of magnificent proportions for a clearing in the woods. Earnest, eloquent, godly, patient and devoted, he was beloved and esteemed not only by his own little flock, but also by all the great and strong leaders in New England. The elder Winthrop spoke of him as a "godly learned man;" and Cotton Mather, in his pedantic, but quaint and picturesque



VIEWS IN NEWARK, LOOKING NORTH, EAST, SOUTH AND WEST, FROM THE PRUDENTIAL BUILDING.

pastor was conveyed hither at the expense of the town; its deacon continued his functions without any signs of reappointment; its records were transferred, and it immediately commenced 'church work,' and its pastor was invested with his office and salary on the new spot without any ceremony of organization or installation. It is true that several of its members were left behind, but they no longer claimed to be a church; and hence there was no church in Branford after the removal, till a new one was organized there several years subsequent. The settlers who came hither from other towns probably transferred their ecclesiastical relations to this pre-existing organization, and the church of Branford, being thus transplanted to a new locality, and having received an accession of new constituent elements, became, after the example of the church in Hartford and several others in New England, the First Church of Newark, and thereupon started

style, wrote of him: "Tis reported by Pliny, but perhaps 'tis but a Plinyism, that there is a fish called Lucerna, whose tongue doth shine like a torch. If it be a fable, yet let the tongue of a minister be the moral of that fable. Now such an illuminating tongue was that of our Pierson."

The church thus transplanted from Branford to Newark was settled in the Congregational order, "and that of the most primitive and distinguishing type," adds good Doctor Stearns. It was not until 1716, or a few years later, that the church united with the Presbytery and became in form of government and in spirit Presbyterian.

The first steps toward building a meeting-house for the little congregation were not taken until September 10, 1668, more than two years after the settlement of the town. On that date the town voted to "build a meeting-house as soon as may be," and

appointed a committee of five men "with full power for the management of the building." The building was of very modest proportions, 36 feet in length, 26 feet in breadth and 13 feet between the joints, "with a lenter to it all the length which will make it thirty-six foot square," and yet it was more than a year and a half after the town had resolved to build it that it began to approach completion. So great an undertaking for the good, pions souls was it to provide even so humble a temple for their weekly worship of their great Creator.

Twelve years after the settlement the Rev. Abraham Pierson closed his earthly career, and was succeeded by his son as pastor of the little flock. He was faithful and well-beloved, strong and influential with his people, and yet, whether from the carelessness and thoughtlessness of the good people, or for some less discreditable reason, "no record tells us and no stone points out precisely in what spot his honored bones rest."

The Rev. Doctor Stearns has drawn a most vivid, breathing picture of the little congregation assembled in their little house

of worship, and the temptation to embellish these pages with it is too strong to be resisted. "Let us now east a glance," he says, " upon the little assembly as they were when the appurtenances of the house of worship were completed and the settlement in the full tide of its youthful prosperity. We will select for the purpose the year 1682. and take some bright Sabbath morning early in June, when the strawberries are red among the green grass, the birds singing in the meadows in a full chorns, and the apple blossoms scarcely yet fallen in the orchards. * * * On the west side of Broad

and nearly opposite the site of the present First Presbyterian Church, with an irregular marshy pond extending nearly to Market street on the northeast, and a few graves marking a small burying-place on a little eminence not far in the rear, stood a low and somewhat singular-looking wooden edifice, without chimney or cupola, spreading out to the breadth of thirty-six feet square on the ground, and almost sixteen feet high in front beneath the eaves, and somewhat less in the rear; the roof sloping down the back side near to the ground, and covering an appendage called a "lenter," or lean-to, ten feet wide, after the manner of some of the old farmhouses, of which remnants may still be found in the country. There it stood, with the gable ends north and south, and the broadside 'nigh fronting on a square with the street,' in the precise spot which Mr. Pierson, the elder, Deacon Ward and Mr. Treat had assigned for it. It is OUR FIRST MEETING-HOUSE—the place of worship. and the place of business-the theatre of all important transactions, civil, military and religious, in the town of Newark, during

its first forty years of existence. There the townsmen, 'after lecture, held their regular stated meetings, and there, on any alarm, the brave soldiers of the little community assembled with their arms at beat of drum to defend their homes and altars, their little ones and their wives. And now we notice two rudely constructed appendages at two corners of the sacred edifice. They are called, in military phrase, "flankers," made with palisades or sharpened stakes, driven near together in the ground and so placed that the soldiers, sheltered behind them, command the sides of the house in every direction. They were constructed in the year 1675, when the Philips war was raging in New England, and the terror of Indian butcheries, so appalling to the people of Massachusetts, Rhode Island and Connecticut, could hardly fail to have communicated an alarm to their friends and relatives, even in this distant settlement. The house itself, as we shall see on entering it, has been fitted for defense, for at the same period the town gave orders to have it lathed and the walls 'filled with thin stone and mortar as high up as the girts'-a work on which

gregation assembled in their little house—thin stone and mortar as high up as the girt

INTERIOR VIEW, LIRST PRESBYTERIAN CHURCH, DURING CENTENNIAL CELEBRATION, 1891.

all the men of the town above sixteen years of age, in companies of twelve, each day wrought in their turns, carrying their arms with them as did the Israelites when they rebuilt their temple, to be ready against sudden surprises. The house of God was thus the house of refuge for the people; and there, had the savage for burst upon them would the womer and children of the town have assembled for protection close by God's holy altar. * * * * * * The holy morning has now dawned Nearly opposite the church stands the residence of the late senior pastor, now occupied we may presume

by his aged widow with her two younger sons, Theophilus and Isaac. * * * * * All along, up and down the street, stand or either side, at regular intervals, the quiet homes of the planters, and everywhere through the open windows may be heard the voice o prayer and psalm-singing at the domestic altar or the low hum o youthful voices studying or reciting the much-prized catechism.

"The hour of public worship now approaches, and the deep tones of the village drum, beaten along the broad, grassy stree by one of the young men, gives the signal to make ready. I beats again; and now, the doors opening, out come in every direction the grave fathers and mothers of the community, the sturdy sons and comely daughters, with the cheerful and ye sober little ones, all in their best attire, and such as never sees the light except on Sabbath days and for the sake of decency it God's worship. Down the cross-streets, and some on horseback from the far-distant mountain, where the settlement was already extending itself, they pour along in pleasant family groups and meet a united community at the house of prayer."



THREE VIEWS OF THE FIRST PRESBYTERIAN CHURCH.

But there was not always peace and loving brotherhood among the pions worshipers. Even as early as the pastorate of Rev. Abraham Pierson's son and successor dissensions began, which finally culminated in Mr. Pierson's withdrawal from his charge and removal to Connecticut. On the institution of Vale College, a few years later, he was appointed its first rector, or president, and held this office until his death, in 1707.

It was in the year 1676, during the pastorate of Rev. John Prudden, the younger Pierson's successor, that the separate title of the church to the "parsonage lands" was first set up, a title that has occasioned continual disputes and litigations ever since. In that year, under authority of an act of the General Assembly, a warrant was taken out for the survey of two hundred acres of land and meadow for the purposes of a parsonage, and "also so much as shall be convenient for landing places, schoolhouse, townhouse, meeting-house, market-place," etc. Two hundred and twelve acres were surveyed under this warrant the same year, of which three were for a burying-place, three for a market-place and six for a training-place. December 10, 1606, a deed was made by the Proprietors conveying these tracts to John Curtis, John Treat, Theophilus Pierson and Robert Young, "to the only proper use, benefit and behalf of the old settlers of the town of Newark, their heirs and assigns for ever." This is the source of the title of the "First Church" to the lands which have been held ever since by the parent church and its off-shoots, and some of which are still in litigation.

The first separate action of town and church, as far as the records give evidence, occurred upon the calling of Mr. Jabez Wakeman to succeed Mr. Prudden as pastor of the church. The town appointed a committee of three men in 1699 "to join with such as the Church shall appoint in speedily looking out for another person to be on trial in order to settlement in the pastoral office." And, soon afterwards, the town appointed another committee "to join with the Church Committee to treat with Mr. Jabez Wakeman about his taking the office of pastor upon him."

The first separation from the old church occurred about 1718. The earlier settlements of the planters clung closely to the river bank. But gradually the settlers pushed their clearings up the hillsides, and even as far as the slopes of the Watchung Mountain. Here, by the year 1718, the settlers had become numerous enough to form a church organization of their own, which they styled the "Mountain Society." This name was retained for a number of years, until the young and thriving church was named and known as the "Second Church in Newark." Eventually, on the setting-off of Orange from Newark, this latter name was also dropped and the church became known as the "First Presbyterian Church in Orange." It was about this same time also that the parent church submitted itself to the Presbyterian forms of church government, the first ordination of a pastor by act of Presbytery occurring in 1719.

The third church to be organized within the boundaries of Newark, as they then existed, was not an off-shoot of the old First Church, but an independent organization. It was a Dutch church, established at "Second River," now Belleville, about the year 1726. The same minister "dispensed the Word and ordinances of God," both to this little church and that at "Aquaekanunc."

But now approached a separation from the parent church, which was not only to rob it of many of its children, but was to cause serious and bitter dissensions, rupture old friendships, and obliterate neighborly feelings. Efforts had been making for several years to establish Episcopaey in the settlements in New Jersey. Missionaries, zealous for their church, pervaded the provinces, eager for converts. One of these the Rev. George Keith, wrote of the neighboring town of Elizabeth: "Many of that town, having been formerly a sort of Independents, are become well affected to the Church of England, and desire to have a minister of the Church of England sent to them," And in 1731 another missionary, the Rev. Mr. Vaughan, writing from Elizabeth to England, says that he finds his hearers increasing, not only in Elizabeth, "but also at Newark, Whippany and in the mountains." There is a delicious, unconscious humor in his additional report that he finds "a general disposition in the people to be instructed and settled in the Christian Faith."



THE OLD SETTLERS MONUMENT. ERECTED BY THE CITY OF NEWARK 10 PERPETUATE THE MEMORY OF THE EARLY SETTLERS.

Fancy the grim scorn of the pions planters of Newark had they been able to read this letter with its patronizing references to their benighted condition. "Settled in the Faith!" forsooth: who so settled as they? But they were soon rudely awakened to the



AN OLD LANDMARK AT ORANGE AND HIGH STREETS.

fact that they were not so firmly settled as they fondly dreamed. The English missionaries' efforts were to be crowned with success, but by causes not to be foreseen or imagined. Col. Josiah Ogden, the son of one and the grandson of another of the original settlers of the town, and a "distinguished member" of the church, was the unfortunate person through whom schism and secession came. And in a curious way. He was accused of violating the sanctity of the Lord's Day by laboring in his wheat fields. His defense was that his labor was necessary, to save his wheat from being ruined by the rain. Nevertheless the church censured him, and he and his friends withdrew from the old church and founded a separate church organization, known as Trinity Church, which submitted itself to the government of the Church of England. The exact year of this withdrawal is difficult to determine. But as Col. Ogden earried up, his censure on appeal to the Synod of Philadelphia in 1734, and was in correspondence with a committee of that body in 1735, it is probable that his withdrawal and that of his friends from the old church did not occur before the Fall of the year 1735. "This separation was the origin," writes Dr.

McWhorter, "of the greatest animosity and alienation between friends, townsmen, Christians, neighbors and relatives, that this town ever beheld. The storm of religious separation and rage wrought tumultuously" and "kindled a flame which was not extinguished till the conclusion of the late war"—fifty years later. Such is the Christian love and forbearance, at times, of the disciples of the meck and lowly Jesus, and thus were "instructed and settled in the Christian Faith" the members of the new communion.

It has already been seen that the second pastor of the little Newark church was chosen to the high and honorable office of first rector or president of Yale College upon its institution. New and equally illustrious scholastic honors now awaited the little church through its sixth pastor, the Rev. Aaron Burr. This brilliant preacher and scholar came to the pulpit of the Newark church in January, 1736. Ten years later, on the 22d of October, 1746, the first charter of "The College of New Jersey" was granted, the Rev. Aaron Burr being one of the persons named therein as trustee of the proposed new college. The Rey. Jonathan Dickinson, of Elizabeth, was chosen to be president of the college, but after enjoying this high honor only four months and a half he died. His death discouraged the new enterprise and caused a suspension of the efforts to establish suitably the new institution of learning. But in September, 1748, a new charter was granted for the eollege, and upon its organization, which occurred in the First Church November 9th, 1748, the Rev. Aaron Burr was unanimously chosen president. The first commencement of the college, a class of seven being already qualified, was celebrated on the same day in the little house of worship thus doubly honored. Among the seven students graduated at this time was Richard Stockton, a name afterwards one of the most distinguished and honored in the State of New Jersey, and whose descendants to this day nobly maintain the honor and glory of the family name.

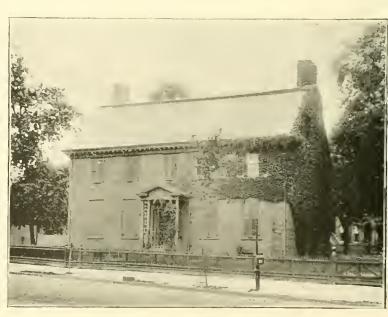
For the first eight years of its existence the College of New Jersey remained in Newark, President Burn officiating also, for the first seven years, as pastor of the little church. It was during this period, on June 7th, 1753, that a charter was obtained for the church incorporating it by the name of "The First Presbyterian Church in Newark," the same name borne by the church to this day. In 1756 the college was removed from Newark to Princeton, President Burn having resigned his pastorate a year earlier, and thus the brief but brilliant connection between the little

congregation and the sturdy and thriving young college was brought to a close. It was during the Rev. President Burr's residence in Newark, but after the close of his pastorate here that his famous son, Aaron, was born, February 6th, 1756. Ohis character and career it is needless here to speak. He may be dismissed with the good Dr. Stearns' scanty notice, "the heir of his father's accomplishments, but not of his virtues."

In 1801, June 6th, a company of nine persons were constituted into a regular Baptist church, and were soon incorporated assuming the name of the First Baptist Church of Newark Their first meeting-house, situated on Academy street, was dedicated September 16th, 1806.

In 1808, the number of Methodists in the town having reached fourteen, they determined upon building a Methodist meeting house, and the following year their modest place of worship called Wesley Chapel, was dedicated. This was situated upon on near the site of the present Halsey Street Methodist Church.

The first Catholic parish in the town was regularly organized in 1824, and was styled St. Johu's. St. John's Church was erected



PLUME HOMESTEAD, BROAD AND STATE STREETS.



MEEKER HOMESTEAD, SUPPOSED TO BE THE OLDEST LANDMARK IN NEW JERSEY.

on the site of the present St. John's Church, but was a very small and modest edifice, being, we are told, "no larger than a large sitting chamber."

The First Congregational Church was the outgrowth and successor of what was at its institution styled "The First Free Church in Newark," which was organized May 22d, 1834, by forty persons who left the First Presbyterian Church for this purpose.

There are now in the city of Newark twenty (20) Presbyterian churches, of which one is especially for colored people and three for Germans; two (2) United Presbyterian; seven (7) Reformed (Dutch); two (2) Congregational; fifteen (15) Baptist; twelve (12) Episcopal; one (1) Reformed Episcopal; Eighteen (18) Methodist Episcopal; one (1) Methodist Protestant; three (3) Lutheran; one (1) Universalist; two (2) Swedenborgian; twenty (20) Roman Catholic; and four (4) Jewish Synagogues; besides nine (9) independent bodies, and eleven (11) missions. There being, in all, one hundred and seven (107) churches and synagogues in the city. These are almost without exception active, vigorous, healthy and flourishing bodies, stimulating the hearts

and minds of their various parishes, inculcating and distributing charity and disseminating secular as well as religious learning.

THE RISE AND GROWTH OF MANUFACTURES IN NEWARK.

IT has already been stated that the settlers of Newark were not mechanics or manufacturers, but farmers. Naturally, therefore, their first concern was the soil and the support and maintenance which it might be made to yield. It may very readily be comprehended that theirs was not a very fierce struggle with the rich, virgin soil, which, to yield its abundant increase needed but the asking. But what with the labor of making their clearings, building their dwellings and doing the thousand and one things incident to the pursuit of agriculture in a new country, the settlers had no time to think of other labors, much less to bestow upon them. Accordingly only such industries were thought of as actually pressed themselves upon the attention of the busy planters.

Naturally, the first of these to reveal its necessity in an isolated farming community was, when the grain had been garnered in, a grist mill.

Accordingly, we find that at a Town Meeting held March 9, 1668-69, this resolution was adopted:

"Item. The Town saw Cause for the Incour-"agement of any amongst them that would "Build and Maintain a Good Mill, for the "supply of the Town with Good Grinding, To "offer and Tender freely the Timber Prepared "for that use, Twenty Pounds Current Pay, "and the Accommodations Formerly Granted "Belonging to the mill, viz: 18 Acres of upland "and 6 of meadow, with the only Liberty and "privilege of Building a Mill on yt Brook; "which motion was left to the Consideration " of the Town Be wixt this and the 12th of this "Mo. Current at Even, and the Meeting is "adjourned to that Time: And in Case any "desire sooner, or in the mean Time to have "any further Treaty or Discourse about his or "their Undertaking of the Mill, they may "repair to Mr. Treat, Deacon Ward and "Lieutenant Swain, to prepare any Agreement "between the Town and them."

Notwithstanding this offer of the Town, which would seem to have been very liberal for that time, no one appeared to be willing to undertake the work on these terms, and we find this record of the proceedings of the town meeting on the 12th of March, 1668-09:

"None appearing to accept of the Town's Motion and Encouragement to build and maintain the Mill, they agreed to set upon it
in a general way, and moving to Lieut. Swain about the matter,
he made some propositions to the Town, and at Length the
Town agreed with him for 20s. by the week or 6 working days,
and three Pounds over for his skill, unless he shall see Cause to
abate it, which if he shall see cause to do the Town will
take it thankfully; for the which he engaged to improve his



BALDWIN HOMESTEAD, ONE OF NEWARK'S OLD LANDMARKS.

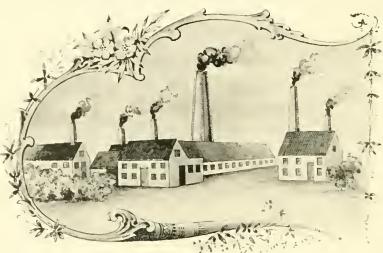
"Time and skill for the best advantage and earrying on to "an End the whole Work, with all that shall be implied by "him so far as belongeth to his Art and Trade of a Millwright; "as also to give his best advice about the Dam, or leveling the "Ground, as the Town shall need him, and this to be done as "soon as conveniently he can; and the Town promiseth to "help him with Work in part of his pay as he needs it, so many "Days' Work as he works at the Mill; common Laborers at two "shillings by the Day and Carpenters at 2s. 6d. the Day. " " "Item. The Town agreed to send some men forth upon the Discovery, to see if they can find any suitable Stones for Millstones."

Even this agreement, it seems, was not sufficient to secure the erection of the mill, which must have been a great undertaking for the little community. Under date of August 24, 1670, appears this record:

"The Town at length Made a full agreement with Mr. Robt. "Treat and Serg't Rich'd Harrison about the Building and Main"taining of a Sufficient Corn Mill, to be set upon the Little Brook
"Called the Mill Brook, with suitable Necessary's, and making the
"Damns, and all other Provisions Needful for and Belonging to
"the sd Mill," &c., &c., &c.

Under this last agreement the great work of building the mill was at last accomplished, and the mill was in operation the fol-

lowing Spring, as appears by an entry in the Town Records under date of May 23, 1671 " Item-it's agreed that the "2nd day of the week and "the 6th day of the same "week and the Next Days "if the Town Need, and the "Work Cannot be well done "on those days that are ap-"pointed and agreed upon "by The Town Meeting and "the Owners of the Mill to "be their Grinding days, " upon which days the Miller " is to attend his Grinding, "and the Town are to bring " their Grists, and the Miller "promiseth to do his "* * * * as for Himself " secure the same until it Be "enclosed and under Lock " and Key."



THE FIRST MALLEABLE IRON FOUNDRY BUILT IN THE UNITED STATES; ERECTED BY SETH BOYDEN, BETWEEN BRIDGE AND ORANGE STREETS, IN 1820; FROM AN ORIGINAL DRAWING BY THE INVENTOR.

Thus was established, upon the "Little Brook," which as long as it existed bore the name of "Mill Brook," the first manufacturing industry of the little town, the forerunner, as will be seen, of multitudinous manufactures which were ultimately to convert the little agricultural hamlet into a great manufacturing city.

The early fame of the town, however, rested upon the quantity and quality of the eider made and sold by the good people. Only seven years after the first settlement Deputy-Governor Rudyard wrote to a friend in London, "At a place called Newark, 7 or 8 miles from here, is made great quantities of Cyder exceeding any we can have from New England or Rhode Island or Long Island." The following year another correspondent wrote, "They make abundance of good Cyder, especially at one town called Newark, which is esteemed at New York and other places that it is sold beyond any that comes from New England."

But the grist-mill and the cider-mill did not long suffice to satisfy the enterprise of the worthy Newarkers. In 1680, a shoemaker, Samuel Whitehead by name, had been permitted to settle in the town, "provided he will supply the Town with Shoes, tho' for the Present we known not of any Place of Land convenient." The leather he used was all bought from a distance, or tanned rudely at home, and this did not long suit the thrift and prudence of the citizens. Azariah Crane desired to establish a tanyard in the town, and succeeded in obtaining permission to do so in 1698, this

subject coming, as did all others, before the town meeting, and being passed upon by the votes of all the citizens. It is recorded, under date of April 19, 1698, that "It is voted that Thomas "Hayse, Joseph Harrison, Jasper Crane and Matthew Canfield "shall view whether Azariah Crane may have Land for a Tan-"Yard, at the Front of John Plum's home Lott, out of the Common; and in case the Men above-mentioned agree that Azariah "Crane shall have the Land he the said Azariah Crane shall "enjoy it so long as he doth follow the trade of Tanning."

Azariah got his land and his tannery was established at once, and the trade in leather and shoes was thus early established on a firm foundation. Its growth was necessarily slow, but it was steady and sure, and ere long it become the staple industry of the town.

There were not wanting other craftsmen in the town sufficient to supply the immediate necessities of an agricultural community. Thomas Pierson and Benjamin Baldwin were weavers, John Ward was a "Turner," which no doubt included cabinet-making and joining; many, indeed, of the original settlers joining some handicraft to their agricultural pursuits. All the casks and barrels for the cider made in the town seem to have been made by the planters themselves, and so great was the demand for them that as early as 1609 it was necessary to prohibit their sale except

"for the use of the Town."
This, by the way, was doubtless the earliest embargo laid in any of the colonics.

Never, perhaps, were pioneers better equipped to establish a permanent and prosperous settlement than these pious founders of Newark. Not with mechanical appliances to make labor casy or dispense with it altogether, or with wealth to purchase the labor of others, but with those strong manly qualities which insure because they conquer success. Health, energy, courage, industry, patience, perseverance - with these qualities failure is impossible, success a certainty. It adds to the glory of these

men, that although their religious feelings were deep and strong, and their religious prejudice no doubt intense, yet they either knew not or had overcome the passion for persecution. While they required every one desiring to join their colony to subscribe to their "fundamental agreements," yet they sought to punish no one for refusing. And they provided in advance that where the conduct or outspoken opinions of any settler should offend the community, there should be no persecution, pains or penalties, but simply that the offender should be paid a fair price for his lands and remove from the community with whom he was not and never could be in sympathy or accord. This was not, of course, absolute freedom of opinion or of religion, but for those times and circumstances, it was a great liberality, as unusual as it was enlightened. Material prosperity could scarcely fail to wait upon men possessed of the strong qualities, the conservative principles, the moderate tempers which distinguished and ennobled the pioneers of this plantation. And there is every evidence that from the beginning the settlement was prosperous.

It is impossible to trace the growth of the industries of the infant town, as no record seems to have been kept of their progress or increase, and no figures are available until the United States census of 1810, from which a statement was compiled under the direction of the Secretary of the Treasury, showing the various industries of the town and their output, as follows;

TABLE OF MANUFACTURES IN ESSEX COUNTY, N. J., 1N 1810.

	No. of		
ARTICLES OF MANUFACTURE.	Factories.	Product.	Value.
Blended and unnamed Cloths and Stuffs		201,836 yds.	\$160,000.00
Woolen Goods in families		43,000 **	
Looms			
Carding Machines		43,000 44	
Prilling Mills		431000	
Spindles			
Fur Hats		26,150	78,480.00
Blast and Air Furnaces	I	324 tons	14,272.00
Bloomeries		609	3,338 00
Naileries		31,360 lbs.	3,136.00 15,000 00
Large Screw, Steel Springs, etc			29,250.00
Tallow Candies			11,520.00
Plating Manufactories			15.000 00
Soap			3,846.00
Leathers, unnamed		324.775	51,970.00
Boots, Shoes and Slippers		18,800	409 000,00 18,800,00
Flaxseed Oil		307,310 gal.	153,650,00
Breweries		1/30001	0,600.00
Carriages			29 500 00
Paper Mills			7,850.00
Potteries			27,750.00
Drugs			30,000.00
Bookbinderies	1		
			\$1 160 871.00

It, will be seen from this table that the boot and shoe industry was then, as it had been for many years, easily chief in the town, and justified the draftsman of the map of Newark, published in 1806, who drew the effigy of a shoemaker in one corner of his map. According to his statement "one-third of the inhabitants are constantly employed" in the manufacture of boots and shoes.

The next opportunity afforded for observing the industrial growth of the town is found in the town census taken in 1826 by Isaac Nichols, assessor. He reports the number of industries and the industrial population as follows:

"Three Iron and Brass Founderies, twelve workmen; one Cotton Factory, six workmen; three Tin and Sheet Iron Factories, nine workmen; one Coach Spring Factory, ten workmen; one Chocolate and Mustard Factory, eight workmen; one Tobacco Factory, thirteen workmen; one Looking-Glass Factory, four workmen one Soap and Candle Factory, four workmen; one Eastern Pottery, three workmen; one Rope Walk, two workmen.

"Besides these, three Distilleries, two Breweries and two Grist Mills. The number of hands employed not given.

"All those employed in trades and other branches are enumerated as follows:

Mr. Nichols enumerated the population of the town as 8,017, and it will be seen from his table that about 1,700, or more than twenty per cent of the whole number were actively engaged in manual labor, speaking well for the industry and thrift of the community.

In 1836, the year of the incorporation of the town as a city, a census was taken by the direction of the Common Council. The rapid growth of the town in the preceding ten years was shown by the enumeration of the population at this census at 19,732, an increase of almost 150 per cent. In connection with this census, Dr. Jabez G. Goble prepared the following exhibit of the indus-

tries of the city, which, he says, "is believed to be essentially correct," and "will exhibit a general view of the business of the city, the greater portion of which consists of its own manufactured articles."

	No. Employed.	Amount.
Boot and Shoe Manufacturers. This branch of trade has always been very extensive	7 i4 610	\$1,523,000 1,055,000
large	847	1,002,000
Saddles, harness, whips, &c	590	885,500
markets. Tanning and Currying The principal portion of this business is done in the Swamps in Market	1,591	8401000
street. Coach-axles, springs, door-locks, brass mountings,	150	849,200
&c	220	250,000
Coach-lace, tassels, fringe, &c	112	80,000
ornamental patterns now in usc	125	225,060
Cabinet do	145	180,000
Jewelry do	\$ < >C)	225 000
Trunk and Chair do,	106	90,000
Silverplating do	100	1004000
Sash and Blind do	107	70 000
past year		200/000
branches, may be fairly estimated at		500,000
		\$8,124,790

In 1861 the value of the manufactured products of the city had swelled to the sum of over \$23,000,000. The Civil War scarcely interrupted the industrial activity and prosperity of the city, which was kept busy during the entire period of its continuance in manufacturing for the Union armies small arms, accourrements, saddlery, harness, clothing, &c., &c. But the close of the war witnessed a wonderful increase of prosperity, and the growth of the city's manufactures was marvelous, both in volume and variety. So vast and varied became the products of the city's teeming brains and skilled hands that the idea occurred to a few enterprising and far-sighted citizens of still further advancing the city's business and manufacturing interests by giving an exhibition of all its varied manufactured products. After an agitation lasting some time, the idea finally crystallized into action, and the "Industrial Exhibition" was opened in the old Rink building, on Washington street, on August 20, 1872. The exhibit was confined entirely to goods of Newark manufacture, and proved a complete triumph for its projectors. Six hundred and ten exhibitors were represented, although no premiums had been offered and no extra inducements held out to prevail upon them to exhibit their products. The exhibit was a complete surprise, not only to the city itself, but to the entire country. Visitors came from far and near, and the President of the United States himself honored the exhibition with his presence and praise. Other dignitaries followed in his train, and no less than 130,000 citizens thronged through its gates during the fifty-two days they were kept open.

In spite of financial depressions and commercial panics, the city has continued, with but slight interruption, to enlarge its industrial borders and multiply its products during the nearly a score of years since the holding of the Industrial Exhibition, which was in 1872 its wonder and its boast.

THE FIRST LOCOMOTIVE USED IN THE STATE OF NEW JERSEY; BUILT BY SETH BOYDEN, IN 1838, FOR THE MORRIS & ESSEX RAILROAD.

THE CITY OF NEWARK TO-DAY.



AVING made an effort in the preceding chapters of this work to set forth simply and briefly the earlier history of the city of Newark from its settlement to the present time, it will be the purpose of the following pages to exhibit and illustrate the city as it is to-day -its government, its public institutions and charities, its schools and academies, its churches, its homes, its manufactories and work shops-in short, all the varied activities, interests and enterprises which make it a great, busy and flourishing manufacturing city,

the proud home and splendid embodiment of intelligence and industry.

The city is finely situated on the steel high roads between the great cities of New York and Philadelphia, and on the Passaic River. Its transportation facilities by railroad and water are unequalled. It is less than thirty minutes from the city of New York by rail, and about an hour by water. Five railroads and trains innumerable each day, transport its passengers and its goods to and from the great metropolis, and to and from all the countries and cities of the world.

The territorial jurisdiction of the city embraces an area of 18 square miles. Its improved streets aggregate a length of 194 miles, of which 53 miles are paved, and its sewers a length of 98) miles. It has a combined area of 76 acres in parks. And it now has a supply of water which for purity, wholesomeness, sweetness and abundance, is absolutely unequalled.

As the birds-eye views of the city reproduced in this work show, the large territory embraced within the city's limits is well built upon, but not overcrowded. The salt marshes or meadows in the southeastern portion of the city, are as yet sparsely occupied by either dwellings or factories, but even here business and manufacturing enterprise is draining and reclaiming the marsh, and buildings and dwellings are multiplying.

The innumerable factories in the city are almost without exception well and strongly built, finely ventilated and lighted, and are

excellent examples of factory and mill architecture. The dwelling houses evince the prosperity and thrift of the inhabitants who as a rule are well and comfortably housed, while many of the larger dwellings, as the illustrations of the handsome homes of the city given in this work will show, are models of comfort, convenience and beauty.

The population of the city, according to the United States cer sus of 1890, was 181,518. But according to a census taken b the city authorities a few months later it was 193,055. It is mor than probable that the latter figures are the correct ones, as th city census was taken by tax assessors familiar with every localit and with almost every inhabitant in their respective districts At the present time it is probable that the population of the cit exceeds 200,000, as the growth of the city in every direction since the United States and the city censuses were taken has bee marvelously rapid. In 1890 a grand total of 1,554 new building were erected within the city limits, of which 1,238 were dwellings while in 1891, the number of new buildings was doubtles equally large if not larger. As these new buildings are, almost without exception, occupied immediately upon their completion these figures show a large increase in the population of the cit within the last year and a half.

The future growth and prosperity of the city is assured, an will be continuous, steady and vast. New manufacturing indutries are constantly being attracted to the city by its magnificer facilities for production and transportation, the reasonable price and rents asked for lands and factories, the low tax rate and the perfect police and fire protection which the city affords. An with this constant accession of new industries and enterprise comes a vast and steady flowing stream of workmen and the families, certain of employment, present comfort and future competence. In addition to all these, there is a large overflo every year from the city of New York of those who look for cheaper and quieter homes than the great metropolis can furnis Moreover, the industries of the city are so diversified that r depression in any one industry can materially interfere with the general growth and prosperity of the town. Altogether, it seen safe to predict that the city of Newark will at no very distant da be the largest and most flourishing manufacturing city in th United States, if not in the world.

The city is both well and cheaply governed. The tax rate for the year 1891 was only \$1.82 upon each \$100 of assessed valuation

and this included the county as well as the city rate. The assessed valuation of property within the city for taxable purposes was in 1891 as follows:

Real estate	 	٠.	 	 	 	 	 		 	.\$	88,729,950
Personal property	 		 	 	 				 		25,265,475
Making a total of	 								 	.8	117,005,425



CHY HALL

which was an increase over the assessed valuations for 1889 of \$11,790,821. The credit of the city can scarcely be surpassed. The management of its finances is honest, conservative and wise; and although public improvements are being constantly carried on, and there is never any pause in the efforts of the municipal authorities to improve, beautify and adorn the city, yet all these public works are carried on and managed in so wise and skillful a manner that the burden of paying for them is scarcely felt by the taxpayers. So excellent is the credit of the city that it has no difficulty in placing such bonds as it finds it necessary to issue, at 4 and 4½ per cent.

The inhabitants of the city are in the main enterprising, industrious, thrifty and prosperous. Considering the size of the city, such poverty as exists within its borders is almost insignificant. There is employment for all who are able and willing to work, and at fair wages, so that none, except those stricken by disaster or disease, need know the name of want. And for these unfortunate and distressed charity is liberal and abundant.

In order to give a complete view of the city in all its interests, it is deemed necessary to give a detailed account of the city government in all its various branches. This seems naturally to follow at this time before an effort is made to exhibit the great industrial, financial and other activities of the city.

The city was first incorporated by the name of "The Mayor and Common Council of the City of Newark," and this name has never been changed in all the subsequent legislation relating to the city and its government, although many changes have been made in the powers, duties and responsibilities of these officers.

The Mayor of the city at present is Joseph E. Haynes, who has held the office for the past eight years, or for four terms of two years each. His staff, or, if it may

be so styled, the executive department of the city government, is very limited in its extent and personnel. The Mayor is allowed a private secretary and one additional clerk, and, in addition, a police officer is detailed to stand gnard at the executive door during office hours, and to act as Mayor's messenger. Not an imposing staff, truly, but with it the Mayor of this great city must needs be content. During the absence of the Mayor from the city the executive, duties devolve upon the President of the Common Council.

In times past the Common Council was a proud and important body. Almost all the patronage of the city was exercised by it, and the key of the city treasury was in its hands. Nearly all the city officials were elected or appointed by it. Policemen, firemen and lesser heroes were named and practically appointed by the aldermen of the various wards, and consequently, an alderman in his ward was a great and mighty man. In those days to be an alderman was to be a king. But times have changed and aldermen have changed with them. The Common Council has been shorn of almost all its patronage and power, and an alderman is no longer the great and mighty ruler that he was. Independent commissions control the police, fire, health and other departments, and the entire field of Public Works has been transferred to a new and independent board. The Common Council has now but little to do besides making the annual appropriations demanded by the various commissions.

The Common Council, as the Board of Aldermen is styled, is composed at present of thirty members, two aldermen being elected from each of the fifteen wards into which the city was until February, 1892, divided. At a meeting of the Common Council held February 5, 1892, an ordinance was passed dividing the city into nine wards or districts, and providing that hereafter but one alderman should be elected from each of these nine districts. The aldermen composing the present board are



JOSEPH E. HAYNES, PRESENT MAYOR OF THE CITY OF NEWARK.

LYMAN E. KANI 1st. and, Daniel Lynch.

FRANK M. PARKER, 3rd.

4th. 5th. Joseph P. Henderson.

Frederick Burgesser,

oth. John H. Huegel,

EDWARD F. McCORMACK. FREDERICK E. STHER. Augustus Dusenberry.

EDWARD GOELLER.

John H. Ety. WHITIAM SCHAEFER. ing. The permanency of the force, thus assured, permits the attainment of perfect discipline and efficiency, and the police department of the city of Newark as it exists to-day, is in these respects equalled by very few, if excelled by any. The police force numbered in 1891, 261 officers and men, officered by a superintendent, a chief, four captains, and the necessary subordi-



VIEW OF THE CITY HOME.

7th. John F. Mahan,

8th. EITAS G. HFITER, 9th. ALEXANDER H. JOHNSON,

George 11. Larue, ioth.

11th. John A. Furman, WILLIAM HARRIGAN, reth.

PETER ULRICH, 13th.

WILLIAM STAINSBY, rath.

DENNIS F. OLVANEY,

JAMES FILZSIMMONS.

WATSON RAND.

TAMES A. ARNOLD. TERENCE SMITH.

John Hausman.

Frederick D. Roerich.

FERDINAND FREIENSEHNER.

Frederick F. Bioren.

WILLIAM WANGNER.

The most powerful of these commissions is the newly-created "Board of Street and Water Commissioners," appointed by the Mayor, under authority of an act of the Legislature passed in 1801. The first members of this board, appointed by the Mayor in the spring of 1891, were James Smith, Jr., Dr. Hugh C. Hendry, Thomas Harlan, Reuben Trier and Ferdinand A. Hahn. The board was organized by the election of James Smith, Jr., to be its president, and Enos Runyon its clerk; Charles Marsh, superintendent of works, and Edward L. Price, counsel. The powers of this new board are very sweeping. It is "to lay out, open, grade, alter, vacate or change the lines of streets," &c.; "to pave, re-pave, repair, improve or clean streets," &c.; " to make any street, highway or sewer constructions," &c.; "to control and regulate the use and occupation of the streets, &c.; remove by contract ashes, &c.; control, operate, &c., the public water supply, and collect water rents and charges; control, &c., public parks and places, public docks," &c., &c.

The Police Commissioners are appointed by the Mayor and form a non-partisan body, two of their number being chosen from each of the great political parties. The present Police Commissioners are John W. Strahan, Edward Maher, Henry Dilly and Osceola Currier. The Secretary of the Board is Joseph M. Cox. This board has the control and management of the Police Department, but can only remove a police official for cause, after hear-



SAMUEL H. PEMBERTON, CITY CLERK.

nate officers. For police purposes the eity is divided into four precincts, the first being under the command of Capt. Michael Corbitt; the second under the command of Capt. Andrew J. McManus; the third under the command of Capt. William P. Daly; and the fourth under the command of Capt. Charles Glori. The Superintendent of Police, an office created by the Legislature of 1891, is William H. Brown, and the Chief of Police is Henry Hopper.

The Board of Fire Commissioners is also appointed by the Mayor, and is likewise a non-partisan body. The present Fire Commissioners are Edward Schickhaus, Marcus L. De Voursney, Henry R. Baker and Hugh Kinnard. The Superintendent of the Fire Department is William C. Astley, and the Chief of the Fire Department is Robert Kiersted. The department possesses eleven steam fire engines, three hook and ladder companies, and one chemical engine. It has an elaborate and complete firealarm telegraph system, and firealarm signal boxes, so that a fire in any part of the city may be reached by the fire engines at once. In addition to the engines maintained by the Fire Department of the city, the Board of Fire Underwriters maintain a Salvage Corps, whose duties are sufficiently indicated by its name. The city is thus amply and efficiently protected from fire.

The Board of Assessment and Revision of Taxes is also appointed

by the Mayor. Its duties are to make all assessments of all property within the city for taxable purposes, to keep proper records thereof, to revise the same whenever necessary, and to hear and determine all appeals from citizens in matters of taxation. The present members of this board are Philip Lowy, Henry G. Darey, Marcus S. Richards, Paul W. Roder and Owen F. Conlon. The Secretary of the Board is John J. Berry.

The Commissioners of the Sinking Fund are Robert F. Ballantine, Frederick Frelinghuysen, Frederick H. Teese, and the Mayor and Comptroller *ex-officio*. The Sinking Fund is intended to meet the various issues of city bonds as they respectively fall due, and these Commissioners have charge of the investment of the funds intrusted to their charge until such times as they are needed for the purpose of meeting and retiring bonds.

The Board of Excise Commissioners have charge of the granting of licenses for the sale of spirituous and malt liquors and wines within the city limits. They are at present, Herman Schalk, Abraham Jenkinson and Peter Grace.

The Health Department is possessed, under recent legislation, of very ample powers for the care and protection of the public health of the city. The present members of the Board of Health are Tyler Parmly, Dr. H. C. H. Herold, Dr. Charles M. Zeh, Alexander H. Johnson, Moses Strauss, William B. Guild, S. S. Sargeant, Edward Dunn and Dr. F. B. Mandeville. The Health Officer is Dr. Charles Lehlbach, Jr.

The Trustees of the City Home are the Mayor, ex-officio, Augustus Dusenberry, Dr. John B. Richmond, Dennis F. Olvaney, Elvin W. Crane, Dr. Edward J. Ill and George W. Vernet. The City Home is a reformatory institution for wayward and truant children, and its discipline is intended to lead them back and accustom them to walk in ways of usefulness and sobriety.



A. JUDSON CLARK, SR. AND A. JUDSON CLARK, JR., TAX RECEIVER AND CHIEF CLERK.

The Directors of the City Hospital are Cortlandt Parker, Henry Lang, David H. Barnet, Philip W. Cross, George A. Halsey. John Hogan, J. Ward Woodruff, Dr. P. V. P. Hewlett George R. Kent, and the Mayor, the President of Common Council and Chairman of Finance Committee, ex-officio. They control and direct the hospital maintained by the city for its suffering poor, and also maintain at the hospital a training school for nurses.

The Free Public Library of the city is managed by a board of trustees which is at present composed of Frederick II. Teese, L. Spencer Goble, James Peabody, Edward II. Duryce and Samuel J. Macdonald, besides the Mayor and the Superintendent of Public Schools, exofficio. The Free Library is splendidly housed and elegantly equipped. It contains a library of almost 30,000 books, besides a reading-room furnished with one of the most complete lists of newspapers and periodicals, domestic and foreign, in this country. Delivery stations (since abandoned) have been established by the Trustees in the various outlying districts of the city, so that the library is practically brought home to all. The Librarian at present is Frank P. Hill, a trained and experienced librarian.

The various other officers of the city, and heads of departments, are as follows: City Counsel, Joseph Coult; City Attorney, Frank C. Willcox; Comptroller, James F. Connelly; Treasurer George W. Howell; Auditor of Accounts, Fernando C. Runyon; Clerk, Samuel H. Pemberton; Receiver of Taxes, A. Judson Clark; Surveyor, Ernest Adam. These officers perform the duties which the titles of their various offices indicate.

The city also maintains two District Courts, so called, which are for the hearing and determination of small causes and actions between landlords and tenants. The Judge of the First District Court is Hon. John G. Trusdell, and the Judge of the Second



JOHN HUNKELE, STREET COMMISSIONER, 1891.

District Court is Hon. Thomas S. Henry. The Board of Education, which has the control and management of the schools of the city, will be noticed in the chapter relating to schools, and the financial institutions, manufactories, etc., of the city in various appropriate chapters.

The city of Newark is the county seat of Essex county, New Jersey, a large and populous county. This brings within the city the several county officials, some of whom, indeed, are better known than some of the city officials. The principal county



PHILIP LOWY, PRESIDENT BOARD OF ASSESSMENT AND REVISION OF TAXES.

officials are: David A. Depue, Justice of the New Jersey Supreme Court and Judge of the Essex County Circuit Court: Andrew Kirkpatrick, Judge of the Essex County Common Pleas Court, Orphans' Court, Special Sessions, Quarter Sessions and Oyer and Terminer Courts: Michael J. Ledwith and Dr. Charles M. Buttner, Associate Judges of the last named courts: Jacob Haussling, Sheriff, and George M. Titus, Under Sheriff: County Clerk, Samuel A. Smith; Surrogate, John B. Dusenberry: Register of Deeds, Richard E. Cogan; Prosecutor of the Pleas,



HERMAN SCHALK, PRESIDENT EXCISE COMMISSIONERS.



JOHN S. BELL, EX-CHIEF L. S. SECRET SERVICE.



JOHN F. YOUNG, ALDERMAN, 10TH WARD.

or District Attorney, Elvin W. Crane; Collector and Treasurer, Thomas J. Regan; Auditor, Hugo Geissele.

Newark is also a port of entry of the United States, having been so created in the year 1834. The United States Government, therefore, maintains a Custom-house here, in addition to its Internal Revenue Collector's department, Post-Office, etc. The Collector of the Port of Newark is Eli H. Reynolds, his deputy, William J. Martin. The Collector of Internal Revenue for the district in which Newark is included, is George H. Large; Deputy Collector, Samuel V. S. Bruen. All these gentlemen



FREDERICK BURGESSER, ALDERMAN, 5TH WARD.

have their offices in the Post-Office building. The Postmaster of Newark is Edward L. Conklin; Assistant Postmaster, William F. Utter.

BRIDGES OVER THE PASSAIC.

Nine bridges span the Passaic River at Newark, and a tenth is projected and will no doubt be erected within a short time. Three of these bridges are for the accommodation of vehicles and foot passengers; the other six are viaducts owned and used by the various railroads which enter the city. Two of the railroad viaducts furnish accommodation also for foot passengers, so that



GEORGE H. LARUE, ALDERMAN, 101H WARD.



ELIAS G. HELLER, ALDERMAN, 8TH WARD.



JAMES CHRISTIE, ALDERMAN, 5TH WARD.

pedestrians may avail themselves of the conveniences of five bridges when desirous of crossing to the other bank of the Passaic. Of the three bridges open to public travel, two are owned and maintained by the counties of Essex and Hudson jointly, and are free bridges; the third is owned by the Newark Plank Road Company, which still exacts toll from those who cross it. The Pennsylvania Railroad Company owns two of the railroad viaduets—those at Market street and at Centre street respectively—and the Central Railroad Company, the Delaware, Lackawanna and Western Railroad Company, the Eric Railway



GEORGE HEINKEL, ALDERMAN, 12TH WARD.

Company and the New York and Greenwood Lake Railway own one each.

The first of these bridges to be constructed was the one crossing from the foot of Bridge street to the town of Harrison, now known as the "Newark free bridge." It was formerly the property of a turnpike company operating a turnpike from Newark to Jersey City, and could be crossed only upon the payment of toll. In 1872 it was purchased by the counties of Essex and Hudson, under authority of an act of the Legislature, for the sum of \$70,000, each county paying one-half of this amount. A few



ANDREW RADEL, ALDERMAN, 11TH WARD,



BENEDICT ULRICH, ALDERMAN, 13TH WARD.



HENRY G. NADLER, ALDERMAN, 4TH WARD.

years later, in 1880, it was replaced by a handsome iron bridge, erected by the two counties jointly at a cost of \$125,000.

The "Plank road" bridge, as it is commonly called, crosses the river at the foot of Ferry street. It is still the property of the Newark Plank Road Company, and toll is exacted by that company of those who cross it. It is used very largely by teamsters passing between Newark and New York, and it is only a question of a very short time when it must be purchased by the two counties of Essex and Hudson, replaced by a substantial iron structure, and made free. It is not now a credit to the city,



JOSEPH P. HENDERSON, ALDERMAN, 4TH WARD.

although it is undoubtedly highly profitable to the company owning it.

The second free bridge crosses the river at the foot of Clay street, connecting Newark with the township of Kearny. It was built by the two counties of Essex and Hudson at an expense of \$75,000, and is a very substantial and commodious iron bridge, resting upon stone piers and abutments. An electric street railway will soon cross this bridge connecting Newark through Kearny with Arlington. As there are several very large mills in Kearny this bridge is of the very highest convenience, both to



OHN BURGEL, ALDERMAN, (TH WARD,



MOSES STRAUSS, MEMBER OF HEALTH BOARD.

the manufacturers' heavy teams, and also to the operatives, many of whom reside, and almost all of whom do their shopping, in Newark.

Another free bridge is projected, to cross the river at a point lower down, and connect the lower part of the city with the town of Harrison. This would open up the development of both sides of the river, especially the Harrison side, and would save teams and passengers coming from the east of the Pennsylvania Railroad a long round-about journey to the free bridges at Bridge or Clay streets.

It is a question of but a few years when the Passaic river will be spanned by free bridges, connecting every part of the city



MARTIN BROSS, MARKET CLERK.

along its right bank with the bank opposite. And this will undoubtedly effect in a short time the annexation of the towns of Harrison and Kearny, to Newark. An agitation looking toward this end has been on foot for a considerable time among the citizens of Harrison and Kearny, and committees have been appointed to secure the necessary legislation, and it is without doubt safe to prophesy that before many years have elapsed, the city of Newark will spread out on both banks of the Passaic, a great manufacturing city, of magnificent proportions and population, embracing a territorial area, exceeded by that of very few of the great cities of the world.



DR. PHILIP ROTH, DISTRICT PHYSICIAN.



WILLIAM CORBITT, SUPERINTENDENT OF CITY DOCK.







EDWARD DUNN.

THE BOARD OF HEALTH.

PROBABLY no department of the city government is better equipped for the performance of its important duties than the Health Board, and perhaps none, where the ample powers conferred by the State Legislature are exercised, with greater

discretion. Its chief function being the maintenance of the public health, it is little wonder that the law-making powers clothed this board with authority akin to extraordinary, for often in the work of seeking out the lurking places of filth, purposely concealed



EX-JUDGE PAUL W. RODER.



DR. WILLIAM TITUS



JOHN A FURMAN, ALDERMAN TITH WARD.



PETER ULRICH, ALDERMAN 13TH WARD.

by the ignorant or such as are viciously inclined, the strong hand of the law must needs be called in as an efficient helper. It needs no other evidence to satisfy the most inquisitive of the general healthfulness of the city of Newark than data furnished by the Health Board. The low death rate, the very great freedom of the city from epidemics, or endemics, shows very plainly the fact of the faithful performance of duties by the Board itself, and the efficiency of its officers, agents and inspectors, to whom is entrusted the work in detail.

The abundant supply of pure mountain spring water flowing through the streets and into the domiciles of the citizens is doing much to aid the Health Board in the great work of making Newark the cleanliest and healthiest city in the country. It has many other advantages which are wonderful helpmates to cleanliness and consequent healthfulness. Among these location is all important. Just far enough from the sea to have the air sufficiently charged with salt as to make it wholesome, and close to the Passaic River and Newark Bay, great natural channels which serve a main outlets for the hundreds of sewers forming a perfect net-work under the streets of the city and carrying all the sewerage matte away to sea. Then the rolling nature of the ground upon which the city is built—foot-hills indeed of the Orange Mountains which skirt its western boundary—giving to a large proportion of its people not only a beautiful mountain scenery upon which the eye can dwell with satisfaction, but to their building plots as the hill recede to the river and sea, a drainage by nature unsurpassed by any city in the country.



WILLIAM WANGNER, ALDERMAN 15TH WARD.



JOHN II. LLY, ALDERMAN 5TH WARD.

THE POLICE DEPARTMENT.

HE

HE citizens of Newark are modestly proud of the discipline and efficiency of the Police Department of the city. In these respects it falls little, if any, short of those which are acknowledged to be foremost. Taking into consideration the limited means at the disposal of the Board of Police Commissioners, the high standard of excellency attained by the department, and the well-nigh perfection of the equipments and appliances, speak volumes

in praise of the ability and integrity of the Commissioners and the skill and fidelity of the officers and men of the department. The conservatism and economy of the Common Council of the city, which makes the appropriations for this as well as almost all the departments of the city government, the charter limitation of the municipal expenditures, and the persistent and politic desire of the appropriating power to keep the annual tax rate in the city as low as possible—all these causes operate to keep the appropriations for police purposes within the narrowest possible limits. Consequently the growth of the police force in point of size has not kept pace with the rapid growth of the city in population and area. The intelligent citizen who deems it his duty to inform himself upon municipal affairs, cannot fail but be convinced that our police force is insufficient in numbers for so large a city. He can only hope that in the very near future this deficiency shall be supplied, and in the meantime congratulate himself and the city upon the hearty, enthusiastic and

efficient services rendered by these gallant guardians of the public safety.

Under the charter of the city, the Common Council was given the right "to establish, organize and control a day and night police, and to regulate and define the manner of their appointment and removal, their duties and their compensation." power the Common Council employed to establish the Police Department and, mainly through its Police Committee, to regulate it. Appointments to the force being in the hands of the Aldermen and the Police Committee, and there being no restrictions upon the power of the Common Council to remove from the force for political or other reasons, it came about naturally that appointments were often the rewards of party service, and removals the penalty of adhering to the vanquished party. This condition finally became notorious and the Police Department suffered not alone in discipline and efficiency, but also in the lack of respect entertained for it by the community at large. At length those interested in the welfare and progress of the city sought to devise a remedy for these evils, and the result of their efforts was the passage, in the year eighteen hundred and eightyfive, by the Legislature of the State, of an act entitled "An Act to remove the fire and police departments in the cities of this State from political control."

This act provided that, in each of the cities in the State which should elect to adopt its provisions, a Board of Police Commissioners should be nominated by the Mayor and confirmed by the Common Council. This Board was to consist of four members,



GROUP OF THE FIRST PRECINCT POLICE SQUAD.



JOHN W. STRAHAN, PRESIDENT POLICE COMMISSIONERS.



OSCEOLA CURRIER, POLICE COMMISSIONER.

"two of whom shall be selected from each of the two political parties, which shall have east or polled the greatest number of votes at the last preceding municipal election." This of course, meant that, at least at the time of the first appointment of the Commissioners, two Democrats and two Republicans should be

appointed. This Board was directed to make detailed reports to the Common Council monthly, and the Common Council was given power to expel any member of the Board "on good cause shown, and after a trial of such Commissioner before such Common Council"



HENRY DILLY, POLICE COMMISSIONER.



EDWARD MAHER, POLICE COMMISSIONER.



WILLIAM H. BROWN, SUPERINTENDENT OF POLICE.



HENRY HOPPER, CHIEF OF POLICE.

Subject to such supervision the Board was given the entire control of the Police Department, and the power of appointment thereto and removal therefrom. Removals, however, were only to be made for good cause and after trial, and never for political reasons. This act was adopted in Newark by an almost unanimous popular vote.

The result of this wise legislation has been the almost, if not entirely, complete emancipation of the Police Department of the city from the shackles of partisanship, and a gradual and steady improvement in the discipline and efficiency of the force. Officers and men now realize that their term of office does not depend upon the favor or displeasure of some petty ward "boss," or upon the strength and reach of their political

"pull," but solely upon their capabilities and their fidelity to duty. They are therefore, upon their good behavior. They have the time and the confidence in the permanency of the terms of their offices to study the responsibilities and duties of their respective positions, and to consider how the efficiency and the discipline of the department may be elevated and improved. It is safe to say that no thoughtful citizen, however strong a partisan politically, would now have the old methods of control of the Police Department reinstated.

The State Legislature of 1891 passed an act providing for the appointments of Superintendents of the Police Departments in cities of the first class in the State, meaning Jersey City and Newark. The act provided for the appointment of such



GROUP OF THE SECOND PRECINCT POLICE SQUAD.



FIRST CRIMINAL COURT JUDGE HOWARD W. HAYES

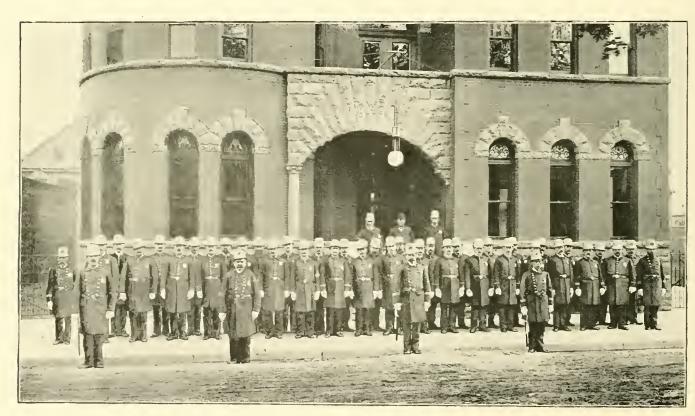


POLICE SURGEON ! H. CLARK.

Superintendent by the Mayor of the city, and that wher appointed he should hold office during good behavior, and be removable "only for cause after trial." Such Superintendents, under the direction of the Police Boards of such cities, were to

have charge and command of the Police Department respectively of such city, above and superior to all the other officers thereof.

Under the authority of this act, the Mayor appointed ex-Sheriff William H. Brown, the genial and popular president of the Joel



GROUP OF THE THIRD PRECINCT POLICE SQUAD.



CAPTAIN MICHAEL CORBITT



CAPTAIN ANDREW J. M'MANUS

Parker Association, Superintendent for the Police Department. This gentleman was widely and well known throughout the city, of excellent standing and reputation, and consequently the Superintendent was well received by the citizens at large.

According to the annual report of the Board of Police Commissioners to the Common Council for the year 1891, bearing date January 1, 1892, the number of men constituting the police force at that date was two hundred and forty-eight, and all other officers and employees of the department fifteen, making the total strength of the department, including the Board of Commissioners, two hundred and sixty-three. Not a very imposing or extravagant array surely, for a city containing a population of two hundred thousand.

Of this number ninety-five are made up of Commissioners, officers, detectives, employees, "chancemen" and detailed men, leaving the number of patrolmen only one hundred and sixty-eight. This is manifestly an insufficient number of men to properly patrol and guard the city. A city of the large area and great population of Newark should properly have twice that number.

The members of the Board of Police Commissioners for the year 1892, are John W. Strahan, Henry Dilly, Edward Maher, and Osceola Currier. The President of the Board is Commissioner Strahan and the Secretary Joseph M. Cox.

Connected with the Police Department are three Police Courts, now known, by authority of an act passed by the Legislature of



CAPTAIN WILLIAM P. DALY



TAPTAIN CHARLES GLORI.



BENJAMIN II. VAN NESS, POLICE JUSTICE, 1890.

W. Hayes, a counsellor at law, is Judge of the First Criminal Court, Redmond P. Conlon of the Second, and Frederick C.



JOHN A. RODRIGO, POLICE JUSTICE, 1800.

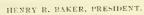
1892, as the First, Second and Third Criminal Courts. Howard Preisel of the Third. The clerks of these Courts are John J. Bertram, William Lomax, Jr., and John P. Fannan, of the First, Second and Third, respectively.



VIEW ON BROAD STREET LOOKING SOUTH FROM MARKET STREET.

THE FIRE DEPARTMENT.







EDWARD SCHICKHAUS.

THE BOARD OF FIRE COMMISSIONERS.





HUGH KINNARD.



WM. H. VAN HOUTEN.



WILLIAM C. ASTUEY, SUPERINTENDENT FIRE DEPARTMENT

THE FIRE DEPARTMENT.

EVERY citizen is justly proud of the Fire Department of the city. In respect to discipline, efficiency, promptitude, ardor and fidelity, it is not surpassed by any fire department in any city. It is sufficient evidence of the competence and efficiency of the city's fire department to adduce the fact that for many years the city has not suffered from any large or extensive fire, although there have been many fires which would unquestionably have developed into vast conflagrations had they not been promptly and skillfully combatted and checked. An alarm of fire being given, firemen and engines are at the spot almost with the suddenness of a fairy tale, not only to check and extinguish the fire, but also to protect and save surrounding property.

The report of the Superintendent of the Fire Department, Mr. William C. Astley, bearing date January 1, 1892, shows that at that date the total manual force of the department was one hundred and thirty-eight men. The apparatus in use by the department



LOUIS M. PRICE, DISTRICT ENGINEER.



ROBERT KIERSTEAD, HILFF FIRE DEPARTMENT.

consisted of nine second-class steam fire engines, three third-class team fire engines, twelve four-wheeled hose wagons, tenders steamers, three four-wheeled hose carriages, tenders to steamer one aerial hook and ladder truck, two trestle, side hook and ladder trucks, three chemical engines, seventeen wagons for use officers and for exercise of horses and one two-wheeled gig. The department also has reserve apparatus as follows: Two secon class steam fire engines, four four-wheeled hose carriages and on trestle-side hook and ladder truck.



ISAAC W. TOWNSEND, BUILDING INSPECTOR, 1891.



ADAM BOSCH, SUPT. FIRE ALARM TELEGRAPH.



MARCUS L. DEVOURSNEY, EX-COMMISSIONER FIRE DEPARTMENT.

The cost of maintaining the Fire Department during the year 1891 was \$175,171.88, certainly not an extravagant sum for a city as large as Newark.

The members of the Board of Commissioners of the Fire Department are Henry R. Baker, President, Edward Schickhaus,

Hugh Kinnard and James H Van Houten. The Secretary of the Board is Horace H. Brown.

The Salvage Corps is independent of the Fire Department, but may properly be mentioned here as part of the fire-fighting force of the city. It was organized twelve years ago by the Underwriters' Protective Association, to protect and save from fire and water, as far as possible, property and goods which might otherwise be entirely or partly ruined.

The citizens of Newark can feel that the money they expend in the maintenance of their Fire Department is not wasted or thrown away. They get their money's worth every day. There are fires, indeed, still occurring, but they are fought and extinguished so promptly that the consequent damage is simply trifling where, but for the skill and efficiency of the firemen, it would certainly be enormous.

Too much can scarcely be said of the dangers often undergone in the discharge of their duties by firemen. Their devotion to duty in emergencies is never measured by the size of their pay but only by the necessity of the case. Not until some fireman loses his life in the discharge of his duty, does the careless public awaken to a sense of the dangers of their calling and the heroism they display. But every day without blare of trumpet or blazon of fame, equally heroic deeds are done by these brave and fearless men.



ENGINE COMPANY NO. 5, PROSPECT STREET.

COUNTY INSTITUTIONS AND OFFICES.

LTHOUGH the pride of the ordinary Newarker cannot point admiringly or with exultant finger at the ancient pile known as the Essex County Court House and its Hall of Records

e lose by,
he can
boast withont fear of
gainsaying the
fact that as pure
and well learned
a judiciary hold courts in the

one, and as wide awake and far-seeing a recording corps keep the records in the other, as can be found in any shire town in the State or Nation.

In the Court house are the business offices of the several county officials, as well as the Circuit Court, and various County Court and Grand Jury Rooms. The Supreme Court Judge presiding in this Judicial District is the Hon.

David A. Depue, who holds court in the south room, and has done so for the past score of years and upwards, and so well is he liked personally, and so eminently distinguished, and so evidently just and fair are his decisions, that he is very likely to remain upon the bench as long as his faculties hold and life lasts.

In the north room sits Judge Andrew Kirkpatrick amid his associates, Judges Michael J. Ledwith and Carl F. Buttner, the one sttting upon the right and the other upon the left, and often helping the Judge to unravel some very knotty skeins of criminal

or business justice.

On entering the building the visitor is ushered into the offices of the popular County Surrogate, John B. Dusenberry, whose father, the late lamented Henry T. Dusenberry, was at one time County Clerk of Essex county. His assistants are Charles D. Hennion, C. Harry Guld, John J. Berry, Jr., and Miss Helen W. Van Ness.

On the opposite side of the corridor are the offices of the High Sheriff, Mr. Jacob Hanssling, who is one of the most deservedly popular and efficient sheriffs with which Essex county has been so liberally blessed in the past.

His Under Sheriff, George M. Titns, was a rising young lawyer, who was fast winning laurels in his profession, but forsook them for the time being in order to help his friend Haussling administer the affairs of his high office. Sheriff Haussling has been peculiarly successful in the selection of his constabulary assistants.



THE COURT HOUSE.



JACOB HAUSSLING, SHERIFF.



ELVIN W. CRANE, PUBLIC PROSECUTOR,



SAMUEL A. SMITH, COUNTY CLERK.



JOHN L. DUSENLERRY, SURROGATE

On the same floor to the rear is found the office of the Clerk of the County, Samuel A. Smith. One of Mr. Smith's predecessors in this office was his father, Dr. William A. Smith, who has lately departed this life full of honor and years.

On the same floor, in the southeast corner, are found the offices

of the County Auditor, Hugo J Geissele, and County Collector Thomas J. Regan, polite and painstaking gentlemen with whom it is a pleasure to transact business. They are assisted in the performance of their duties by Mr. Harry Housel, who has filled his position acceptably for several years.



RICHARD E. COGAN, REGISTER.



HUGO J. GEISSELE, COUNTY AUDITOR.



GEORGE M. TITUS, UNDER SHERIFF.

On the same floor are also found the offices of the County Prosecutor, Elvin W. Crane, and his assistant, Louis Hood Next to and opening out of the Prosecutor's office is the Grand Jury room, where during each of the three stated terms of court held every year, twenty-three good men and true are gathered to



FOWIN W. HINE, EX SHERIFF.

hear complaints, investigate the acts of wrongdoers, and find bills of indictment against criminals and others. Timothy E. Scales is the popular and painstaking Clerk of the Grand Jury.

The visitor is next ushered into the Hall of Records. On ascending the first short flight of stairs he finds double doors opening into the Hall of Records, where Richard E. Cogan presides over the great volumes containing the public records of the county. Here goes on in a silence almost painful the work of recording the records as well as the recording of deeds, mortgages and other paper records of titles.



CORNELIUS LEARY, FREEHOLDER AND PRES'T ESSEX COUNTY ROAD BOARD-



SOLOMON DE JONGE, ERFEHOLDER.



OWEN A. CAHILL, FREEHOLDER.

Ascending to the third story the hall is reached where the Board of Chosen Freeholders hold their monthly conclave and legislate for the county. The Board formerly consisted of forty members but a recent law reduced the number to ten. Dr. Tiesler, of Orange, is Director, Joseph Atkinson is Clerk, and Fred, W. Stevens is Counsel of the Board. The Board is at present composed of the following members: Patrick Lupton, J. J. Berry, Ellis R. Carhuff, Solomon DeJonge, John Scanlan, Thomas W. Kinsey, Owen A. Cahill, Cornelius Leary, Charles Winckler, James Peck.



PETER M. MULLIN, EREFHOLDER, (DECEASED.)

The Freeholders are selected from the several Assembly districts in the county, the same as members of the State Legislature, and conduct the general business of the county, which is principally carried out by committees who report through the Chairman at the Board meeting, held once a month.



DR. THOMAS DUNN ENGLISH, REPRESENTATIVE IN CONGRESS.



GEORGE H. LARGE, INTERNAL REVENUE COLLECTOR.



ESSEX COUNTY ASYLUM FOR THE INSANE, SOUTH ORANGE AVENUE.

The public institutions are the County Penitentiary at Caldwell, the County Jail in Newark, and County Retreat or Insane Asylum on South Orange avenue. The Penitentiary is under the care of Warden John Murray, who is held responsible for the administration of the prison affairs. The committee having the care of this institution visit it twice every month. The County Jail is under the care of Jail Warden McMonagle, who takes his orders from the Prison Supply Committee, who meet twice a month at the Jail and Penitentiary.

The Insane Asylum is under the care of the Committee on Lunacy of the Board of Freeholders. The Physician and Superintendent is Dr. Livingston S. Hinckley. There are nearly five hundred patients in this institution.

A visitor to one and all of these county resorts of the sick and unfortunate is at once struck with the high degree of neatness and order seen everywhere, and the deep interest taken in the welfare of patients or prisoners is abundantly manifest to the most casual observer.

But not until the Egytian pile at the head of Market street has gone the way of all things which have had their day, and a new Court House has been built, worthy in all respects of the great and growing county of Essex, will the smile of satisfaction light up the faces of a progressive people who have been striving for years to induce the Board of Freeholders to wake from their lethargy and build a new Court House.

THE ESSEX COUNTY INSANE ASYLUM.

DURING the year of 1871 there was only one State Asylum for the Insane, that of Trenton. The county of Essex maintained there 110 patients. The report was received by the Board of Freeholders to the effect that the Asylum there was so crowded that but few, if any more, patients could be received. The State Asylum at Morris Plains though nearly completed, was far from that point at which they could receive patients, so the question of obtaining an entrance to asylums in other States was discussed, and overtures were made to the authorities at Ward's Island, Blackwell's Island, New York, and as far away as the State Asylum at Vermont, without success. The Committee on Lunaey of the Board of Freeholders at that time were David J. Canfield, Wm. M. Freeman, Wm. Gorman, Melanethon Smith

and Wm. Cadmus. In January, 1872, this committee reported that the exigencies of the situation required immediate relie and in February they recommended to the Board to lease the property bounded by Camden and Bank streets and Fairmoun avenue, and to erect suitable pavilions thereon for the temporar care of the insane.

In 1872 the Lunacy Committee erected buildings at a cost of \$15,000 on the above site, which were opened for the reception opatients Aug 27, 1872. Fifteen patients were transported from the State Asylum at Trenton, and nineteen were received from the Newark Almshouse, Major John Leonard was appointed.



LIVINGSTON S. HINCKLIY, M. D., SUPERINTENDENT OF THE ESSEX COUNTY ASYLUM FOR THE INSANE.



MICHAEL T. BARRETT, STATE SENATOR.

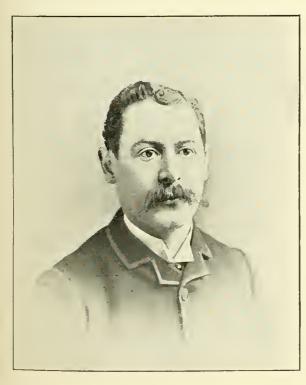


GEORGE W. KETCHAM, ASSEMBLYMAN.

warden, and Dr. J. A. Cross was elected to the position of physician. In 1873 the asylum contained sixty patients.

In 1873 the Committee on Lunaey, composed of D. J. Canfield, Wm. Cadmus, Dr. David S. Smith, Ira H. Smith, D. M. Skinner and the director, Edgar Farmer, reported to the Board the

necessity of procuring a permanent site for the erection of an asylum for future needs. July 9, 1874, various sites were reported to the Board for selection. During this year it was found necessary to enlarge the Camden Street Asylum at an expense of \$7,000 to accommodate the number applying for admission.



LEONARD KALISCH, ASSEMBLYMAN.



JOHN NEIDER, ASSEMBLYMAN.



GEORGE RABENSTEIN, EX-ASSEMBLYMAN.



THOMAS SMITH, ASSEMBLYMAN, COMMISSIONER TO COLUMBIAN EXHIBITION

For the next two years matters progressed slowly in this question, public sentiment being thoroughly weighed, and the Board after numerous discussions, finally in 1878, when the Camden street register indicated that 200 patients were being cared for, decided to push the matter of building a permanent

asylum. The committee on site, after examining seven sets oplans, finally reported favorably upon the present one in 1880.

In May, 1883, the Lunacy Committee reported 333 patients at Camden Street Asylum and presented the overcrowded condi-



CHARLES TREFZ, EX-ASSEMBLYMAN,



JOHN J. BERTRAM. FX-ASSEMBLYMAN.



THOMAS F. CAVANAGH, ASSEMBLYMAN.



ABNER KALISCH, COUNSELOR-AT-LAW

tion, recommending that addition be made to accommodate 100 more without delay. The new building had thus far cost \$56,000, and was far from completion to accommodate the patients at Camden Street Asylum. The warden reported during that year that to date, that by the adoption of county care for the insane, that Essex county had been saved up to date \$248,895.58, compared with State Asylum charges.

In 1883 the Grand Jury, of which Leslie D. Ward was foreman, made a presentment advising better direct medical care of the insane in the County. Asylum.

At the September meeting, 1884, James E. Howell introduced the resolution changing the system of internal management, i, e, placing a competent physician in full charge as superintendent, which was adopted.

On November 9 the patients'were removed from Camden street to the new building on South

Orange avenue, 351 in all. On December 15, at the meeting of the Board, Dr. Livingston S. Hinckley was elected to the office of Superintendent and commenced the duties November 19, 1884. Since this time the asylum has grown to enormous proportions, the number of patients have increased to 570, and at this writing the final wing of the building which was added this year is nearing completion. Dr. Hinckley's ten years' experience has been of benefit to this important charge, and the reputation of the asylum is very good. It is classed as a standard institution, its percentage of recoveries is very high and the mortality very low, and the people of Essex county are to be congratulated in that, aside from caring for their insane at home, they are saved over fifty thousand dollars per year by the method.

THE INTERNAL REVENUE DEPARTMENT.

SINCE the enactment by Congress of the law of July 1, 1562, entitled "An act to provide Internal Revenue to support the Government and to pay interest on the public debt," the city of Newark has been the seat of one of the most important collection agencies of the Government.

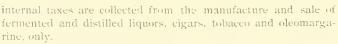
When at the outset, the necessities of the Government required taxes from all possible sources, the State was sub-divided into five collection districts, Newark being the headquarters of the "5th." As from time to time the tax was removed from different articles, the number of the districts was reduced until now there are but two in the State. The First District with headquarters at Camden, and the Fifth with headquarters at Newark, all the others having been merged into the present Fifth District, while



VIEW AT WASHINGTON PARK, ADJOINING WASHINGTON PLACE



DR. D. M. DILL, PENSION SURGEON.



The Fifth District now comprises the counties of Essex, Union, Hudson, Passaic, Middlesex, Morris, Bergen, Sussex, Somerset, Warren and Hunterdon, with its main office in the Government building at Newark, an auxiliary office in Jersey City, and stamp selling deputies at Paterson, Millstone and Helmetta.

The total collections of the district for the fiscal year ending June 30, 1801, were \$4,005.411.71, of which \$1.523,000 came from beer and \$2,053,247 from tobacco; the percentage of the total cost of the entire collections of the district amounting to the sum of \$47,300.11, or 1.18 100 per cent.

Of this vast sum the city of Newark and its immediate vicinity was a large contributor, with its eighteen breweries, its fourteen tobacco manufacturers, and its 218 cigar manufacturers. The



DR HUGH P. RODEN, PENSION SURGEON,

brewing interests alone paying about \$1,000,000 in annual taxes,

The force employed in the Newark office in addition to the Collector, consists of one chief deputy, a cashier, six deputy collectors, two clerks, a gauger and messenger. Of these Mr. S. V. S. Bruen, the chief deputy, has occupied his present position for fourteen consecutive years, and by his executive ability and experience, has contributed largely toward maintaining the high grade the district has always sustained, both at Washington and with the patrons of the office.

There have been seven different collectors since 1862, as follows: D. M. Wilson, to October 31, 1865; A. H. Wallis, to October 31, 1866; G. W. Thorn, to March 31, 1867; Jacob Weart, to June 19, 1871; A. H. Wallis, re-appointed to May 20, 1873; R. B. Hawthorne, to June 13, 1885; Samuel Klotz, to October 31, 1889, and George H. Large, who was appointed November 1, 1889, and is now the Collector.



DR. J. J. DALY, PENSION SURGEON.



DENNIS H. BOUGHNER, BUILDING INSPECTOR, 1802.

THE NEWARK POST OFFICE.

HE

HE new building, now in course of erection, in which the Post-Office Department, the Custom House and the Internal Revenue offices are to be accommodated, has long been needed in the city. The old building, which occupied a portion of the site on which the new building is being erected, was out-

grown for a score of years before Congress could be made to appreciate that fact, and when it made the appropriation for a new post-office building here it made it so sparingly as to be insufficient. The new building will, however, be an ornament to the city, and no doubt provision will be made for the enlargement which will be required in a few years.

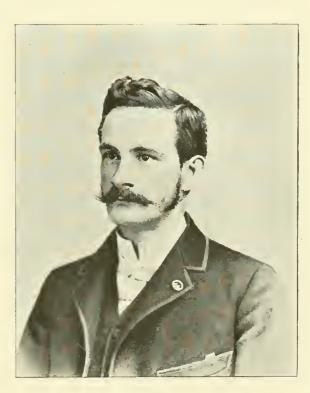
The greater part of the civil and criminal business of the Umted States Courts which are held at Trenton, comes from Newark, Jersey City and the northern part of the State, and provision should be made for holding sessions of these courts in Newark. Court rooms can easily be provided in the new post-office building, and much time and expense can be saved suitors, witnesses and others in the northern part of the State having business in the United States Courts. This needed convenience will undoubtedly be afforded in a few years at the utmost, and the city may then feel that its growing necessities are



THE NEW POST OFFICE



EDWARD L. CONKLIN, POSTMASTER.



WILLIAM F. UTTER, ASSISTANT POSTMASTER.



W. F. OTIS, SUPI. NEWSPAPER DEPARTMENT



GEORGE TAYLOR, SUPT. REGISTRY DEPARTMENT,

recognized and provided for by the Federal Government, which has never been very generous to this rapidly growing city.

The present Postmaster of the city is Edward L. Conklin, who was appointed to this office in October, 1889, by President Harrison. He has been very painstaking and faithful in the performance of his duties, and is always alive to the growing needs of the department under his supervision, and to the wants of the large and busy community transmitting mail matter through his office.

The financial matters pertaining to the office are ably taken care of by his assistant, William F. Utter, and as he had long experience in the $Post_7Office$, he is well qualified to assist the Postmaster in the management.

The carriers' department is in charge of William Saul as Superintendent, an old and tried employe, and one who knows

what a carrier ought to do and how the city should be served.

The clerks are in charge of William F. Otis, as Superintendent. He also has charge of the newspaper and periodical matter, and to him is due the methods used to bring the clerks up to a better or more proficient standard in the distribution of such matter.

The mailing department is presided over by James G. McKittrick, an old railway Post-Office clerk. His experience is of great benefit to the clerks, to whom they look for instructions.

George Taylor is Superintendent of the registry department, a position he has held fourteen years.

William L. Rabone is clerk in charge of the stamp department, and owing to the immense business done there, he has to be exceedingly careful and energetic.

Mr. Conklin is to be congratulated on having such an efficient corps of employes,



WHILIAM I. RABONE, CHIEF STAMP CLERK



JAMES G. MC KITTRICK, SUPT. DELIVERY DEPARTMENT.

NEWARK'S EDUCATIONAL INSTITUTIONS.

HI

HE city of Newark is abundantly supplied with schools, public and private. Its free public school system is probably equal in efficiency to that of any city in the United States, and its standard is among the highest. The pupil in the public schools, entering at the most elementary grade, is led on by easy and almost imperceptible stages, until he is either prepared for college, or for business life in case he does not desire academic training. Thoroughness is

the inspiration and the aim of the system, and the watchword of the

teachers. It is intended that the pupils shall know perfectly, from root to branch, such subjects as are taught in the schools, and such is the discipline and efficiency of the system that even the dullard and the laggard cannot but choose to learn. The public school system is very near to the hearts of the people of Newark, who are watchfully jealous of their rights and of the integrity and efficiency of the system. And their jealous care and watchful anxiety is naturally represented in the Board of Education, whom the people elect as their trustees to manage and direct the schools. This board is at present composed of thirty members. A list of the Commissioners is herewith given. They





OHN P. CONTRELL, S. HOOL COMMISSIONER,



HENRY (, KLEMM, SCHOOL COMMISSIONER.

are Henry J. Anderson, John P. Contrell, Charles Hood, William Johnson, Samuel H. Baldwin, Charles M. Russell, Charles F. Kraemer, Miles F. Quiun, John H. Manning, James P. McKenna, John B. Oelkers, John A. Loftus, Peter O'Brien, Matthew H. Thornton, Willam A. Clark, John E. Jones, William H. Dobbins, Joseph S. Vinson, Hugh McGlynn, John O. Hunt, Peter J. Babcock, Edward H. Hamill, James Mullin, Henry C. Klemm, Gottfried Joithe, George Saupe, L. Eugene Hollster, James L. Hays, Ferdinand Heichemer, Joseph S. Sutphen.

The President of the Board of Education is ex-Senator James L. Hays; Secretary, Mr. P. Lyndon Bryce; Assistant Secretary, Mr. Elwood I. Shurts; Superintendent of Erection and Repairs, William M. Freeman.

The Board appoints a Superintendent of Public Schools who

exercises a constant daily supervision over all the public schools in the city. This position has been ably and faithfully filled for years'by William X. Barringer, Pd. D. Each school is directly managed by a principal, who superintends and directs the subordinate teachers, and whose duty it is to report to the Superintendent and the Board any irregularity that may occur, and to suggest whatever improvements may be necessary or useful to the school under his charge. This constant supervision and unwearying watchfulness ensure the maintenance of a high standard in the schools and keep them abreast of the progress of the time.

The city expended for the maintenance of the public schools in the year 1891, 8461,385.46. The number of children enrolled was 25,757, and the average daily attendance was 17,678. In addition, there was an enrollment of 3.451 in the public evening schools,



WM. A. CLARK, SCHOOL COMMISSIONER,



CHARLES HOOD, SCHOOL COMMISSIONER.



HUGH MC GLYNN, SCHOOL COMMISSIONER.



WHILIAM II, ERFEMAN, SUPERINTENDENT OF REPAIRS.

making the total enrollment amount to 29,208. The number of teachers employed was, male, 35; female, 414; total 449. The city owns 37 school buildings and rents 5, affording accommodation for 439 class rooms, and a total seating capacity of 23,500. Additions are being constantly made to the accommodations, by the erection of new buildings and of additions to those already built. The endeavor being to keep pace as near as possible with the rapidly growing educational needs of the city.

The Newark Technical School is the outgrowth of the Board of

Trade, and was organized in 1884. The present officers are President ex-officio Gov. Leon Abbett; Vice-president, James L. Hays; Secretary, William N. Barringer, Treasurer, Moses Bigelow; Trustees, Augustus F. R. Martin, George H. Phillips, Edward Weston and George H. Ketchem. The object of this school is, as its name implies, to give practical instruction in the mechanical arts.

The private schools and academies in the city are numerous and excellent.



DR. J. S. SUTPHEN, SCHOOL COMMISSIONER.



JOHN O. HUNT, SCHOOL COMMISSIONER.

LAFAYETTE STREET SCHOOL.

THE history of the Lafayette Street Public School runs parallel with the history of the Fifth Ward. The territory lying east of the Pennsylvania Railroad, then the New Jersey Railroad, was constituted the Fifth Ward of the city of Newark in 1848, and at that time embraced all the territory now contained in the Fifth, Tenth and Twelfth Wards of the city.

In the same summer the Common Council purchased three tracts of land which compose the present site, at a total cost of \$2,333, and contracted for the erection of a two-story brick building for a school, at an additional cost of \$5,000, making the entire cost \$7,333.

On July 3, 1849, Samuel W. Clark was appointed principal of the male department, and Miss Mary Ward principal of the female department. The school was opened for the reception of scholars on the 27th

of July in the same year. It was conducted on the Lancastrian plan, one master having sole charge of the department. The teaching was in great part done by the older and more advanced



JOSEPH CLARK, PRINCIPAL.



LAFAYETTE STREET PUBLIC SCHOOL.

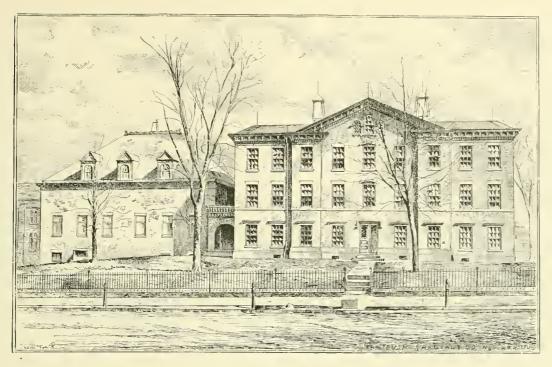
pupils, who themselves received instruction from the principal. Here were gathered in the male department 265 of the neighborhood, including many of the then famous "Rock Boys," a gang of hoodlums that terrorized that portion of the city.

In April, 1857, Mr. S. W. Clark was transferred to the South Market Street School, then just completed, and Joseph Clark was transferred to the charge of this school from the Lock Street School in the Seventh Ward,

In 1862-63 an addition was erected on the rear and the Primary School, heretofore located in Union street, was transferred to this building. About the same time the three departments were consolidated under the direction of the male principal.

In 1877, 1881 and 1884, still further additions were made to the building, which now contains sixteen rooms, and seats 800 pupils, while the valuation has gone up from \$7,333 to \$50,000 at the present time. It is one of the most convenient of the school buildings of the city. From among its pupils are many who have occupied positions of trust and honor, and who are now found among our most esteemed citizens.

Principal Joseph Clark was born in Syracuse, New York, of New England ancestry, He received his education in the Fayetteville Academy, an institution of considerable note in that part of the State. He came to Newark in the fall of 1848. In 1851 he was appointed as assistant teacher in the Lafayette Street Public School. In 1854 he was promoted to the principalship of the Lock Street (now Wickliffe) School, and in 1857 he was transferred to the Lafayette Street Public School, where he still presides. During his long service in the schools of the city he has been closely identified with the interest of that portion of the city, and has been a prominent factor in the lives and character of a large number of those who are now our respected and influential citizens. He has been prominently connected with the Sixth Presbyterian Church, and in the Sunday-school and Church has always taken a prominent place.



NEWARK ACADEMY, HIGH AND WILLIAM STREETS.

THE NEWARK ACADEMY.

In the year 1792 a number of the citizens of Newark formed an association for the purpose of establishing a school which should meet the wants of the village and the surrounding community.

Having agreed upon a plan, they purchased a piece of ground on the corner of Broad and Academy streets, where the post-office now stands.



S. A. PARRAND, PRINCIPAL

In the erection of this building St. John's Lodge of Master Masons united, in consideration of enjoying forever the exclusive use of its third and uppermost story.

Among the means used to raise money for the new school was a lottery anthorized by the Legislature for that purpose, and among the subscriptions to the stock of the new enterprise was a negro slave, "James," who sold for forty pounds.

In 1795 the contributors were chartered as a stock company, the stockholders binding themselves by their charter never to divide any profits, but to devote all proceeds to the further development of the school.

The Academy acquired a wide reputation for thoroughness and efficiency, and was continued in the same building with varying fortunes until 1855, when the property was sold to the United States Government for a Custom House and Post-office. The price received for it was \$50,000, of which amount \$10,000 was awarded to St. John's Lodge of Free Masons.

Two years later the trustees of the Academy purchased the property of the Wesleyan Institute, bounded on three sides by High, William and Shipman streets, where the school has since been located.

The school was opened in its new quarters in 1857, under the charge of Rev. F. A. Adams, as principal, who resigned in 1859, and was succeeded by Mr. S. A. Farrand, who remained in charge until 1865, when it passed into the hands of Mr. C. M. Harrison, who, a few years later was succeeded by Mr. C. M. Davis and Major Hopkins associate principals. In 1875 Mr. Farrand was again invited to take charge of the school, and since that time it has remained under his able management, the number of pupils at the present time being 240.

The course of study in the Newark Academy, beginning with the primary English studies, covers a thorough preparation for college, for the scientific school or for business life.

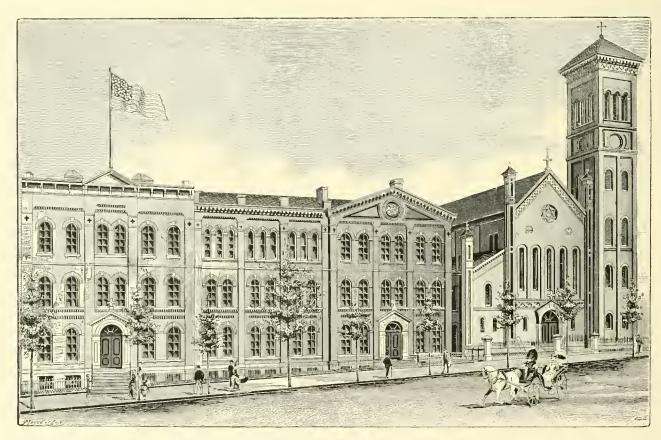
The present Board of Trustees (1891) is as follows: Samuel II. Pennington, M. D., Charles G. Rockwood, Frederick W. Ricord, A. M., Horace N. Congar, Laban Dennis, M. D., Horace Alling, William Rankin, Jr., M. D., George W. Hubbell, A. M., William T. Carter,

ST. BENEDICT'S COLLEGE

POR fourteen hundred years the Benedictines have figured prominently in the history of the world as missionaries, civilizers and educators. St. Augustine, the first Archbishop of Canterbury, and St. Boniface, who converted the Germans to Christianity, were Benedictines. The Danes, the Poles, the Dutch and the Bohemians were evangelized by members of the same order. During the first thousand years of its existence—from the fifth to the fifteenth century—it gave to the church 24 popes and 200 cardinals; it had seen 7,000 archbishops of its

lineal descendants of the "famous Monks of the West," engaged, as their fathers have been for over 1,400 years, in tilling the soil, teaching the rude and ignorant useful trades, accustoming the idle and roving to profitable industry, building schools and colleges for the education of all, but especially for the higher education of the children of the poor.

In this chain of Benedictine abbeys and colleges, St. Mary's Abbey and St. Benedict's College, of Newark, forms a not undistinguished link. Here, as it is and has been in all places and



ST. BENEDICT'S COLLEGE, HIGH STREET.

rule, and 14,000 bishops. In England the Benedictines occupied 113 abbeys and eathedrals, including Westminster Abbey and many others almost equally famous. In Scotland they numbered among their monasteries Iona, Lindores and Melrose. At one time the sum total of their houses footed up the magnificent sum of 15,000, so many refuges of art and letters, where, protected by a religious halo, their inmates kept alive the sacred lamp of literature, when outside their walls the world was given up to rapine and civil war.

After centuries of decline, our own age has witnessed the marvelous rejuvenation of this ancient order. It is rapidly regaining its lost ground in Europe, and off-shoots of the parent tree have been planted in the virgin soil of Australia and New Zealand. In the United States there is not a section, east, west, north or south, without its large abbeys and numerous dependent priories. From New Hampshire in the East, to Oregon in the West; from the hyperborean regions of Minnesota to the sunny clime of Florida, there is scarcely a State or Territory without its

times since the foundation of the order, the school or college is inseparable from the abbey. While a large amount of public and private ceremonies and prayers is included in the duties of a monk, it is also the aim of the "learned Benedictine" to be a man of science, a scholar and a schoolmaster. St. Benedict's College has been before the public now almost a quarter of a century-1868 to 1892-and has conscientiously and unostentatiously striven to carry into effect the intention of its founders. While instructing, with a preference, in those branches which pertain to a liberal education, the knowledge of which is indispensable to those who wish to enter the ranks of the elergy or embark in any professional career, it has not neglected the needs of those whose circumstances or inclinations induce them to prefer the commercial to the classical course. By all means in its power, it seeks to make its pupils Christian gentlemen. serviceable to their fellowmen, lovers of their country and faithful to their God.



ST. VINCENT'S ACADEMY, WALLACE PLACE, WARREN, CABINET AND BRUCE STREETS

ST. VINCENT'S ACADEMY.

THIS institution, founded in 1860 by the Most Rev. Bishop Bayley for educational purposes, is under the patronage of the Rt. Rev. Bishops of Newark. The location is upon very high ground and is unsurpassed for healthfulness. It is easy of access; the Bank Street and the Littleton Avenue horse-cars pass the Academy to and from the main depot, Market street, of the Penn. R. R. in Newark.

It offers superior attractions to parents who desire to give their children a useful as well as thorough education; and it will be the constant endeavor of the Sisters to instill into the minds of their pupils, principles of virtue and religion; to accustom them to a polite and amiable deportment, as well as to habits of order and neatness.

The present large and extensive building, erected in 1888, is furnished with all the modern improvements requisite in a thorough course of study. Ample ground has been reserved exclusively for the necessary out-door exercise of the pupils; besides, when the weather permits, they are obliged to take, daily, about an hour's walk, accompanied by one or more of the Sisters.

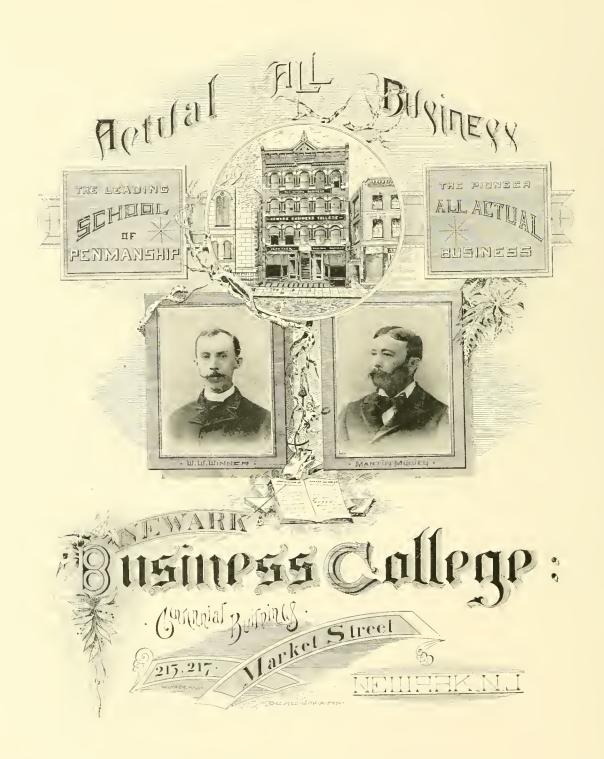
ST. MARYS ACADEMY.

ST. MARY'S ACADEMY was at first known as the "Ward's Estate," and was purchased in 1859 by Rt. Rev. J. R. Bayley, first bishop of Newark. It was occupied by the Sisters of Charity, as their Mother House, till they removed to Madison, N. J., in 1861. After this the building was used as St. Mary's Orphan Asylum till 1865, when the Orphanage at South Orange was ready for the orphans. In

the fall of 1865 St. Mary's Academy was opened. Part of the building was at this time a hospital. St. Michael's Hospital was not in existence then. In 1874 the old "Ward Mansion" was razed, and the present beautiful building was erected in its stead. St. Mary's Academy has ever stood among the first in the city, regarding numbers and success of its pupils.



ST. MARY'S ACADEMY, WASHINGTON AND BLEECKER STREETS.

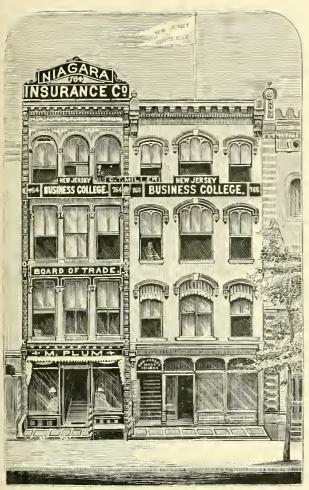


THIS institution was founded by Prof. Martin Mulvey, A. M., in 1851, to carry out an idea to which he had given much study and thought. This idea is that a business school should be a reflex of business life; that the practice of business is just as important to students as the practice of book-keeping, and that the two should go hand in hand from the beginning to the end of the course. The college is located at Nos. 215 and 217 Market street, (Centennial Buildings.)

All Actual Business, therefore, is the motto of the school, and

a proof of the wisdom of its founder in adopting that motto is the fact that other leading schools throughout the country are following suit, and the time will certainly come when all business schools worthy of the name will embrace the same idea.

Like all institutions destined to survive the Newark Business College encountered great difficulties in its infancy, but its principle was right and it was bound to prevail, so that now it is firmly established on a sound fianancial basis, and it has a promising future of good works before it.



NEW JERSEY BUSINESS COLLEGE

NEW JERSEY BUSINESS COLLEGE.

FEW cities have educational institutions of a higher character than are to be found in Newark, and where they are conducted by better informed or more thorough, competent teachers. Especially is this so in regard to the schools where mercantile and business education in general is taught. These institutions are termed Business Colleges, and are conducted for the special purpose of fitting young men and women for business and clerical life.

Among the most popular and best patronized of these colleges is the New Jersey, at 764 and 766 Broad street, of which Prof. C. T. Miller, a thoroughly competent educator is the proprietor and principal. Such a remarkable aptness has Prof. Miller shown for fitting young men and women for business pursuits that thousands who have had the benefit of his instructions are now engaged in successful business or are filling responsible positions as book-keepers, accountants, secretaries, clerks, salesmen, etc., not only in Newark but in the principal cities and towns throughout the country.

The New Jersey Business College was established in the fall of 1874, with the enrollment of a very small number of pupils, when Prof. Miller began his business life, and now his college has a standing equal to any Business College in this country, and has an enrollment of more than three hundred and fifty pupils annually. At each of its succeeding commencements many of its students go forth from the college halls bearing the parchment of honor and diploma of fitness to uphold the business industries of the city, state and country.

The course of study is of the most thorough and systematic character, embracing as it does, book-keeping in all its details, theoretical and practical. Business penmanship likewise under the direction of accomplished penmen, is made an important feature. Type-writing is also taught.

That the Business College of to-day is an important factor in furthering the business interests of the community, is a fact that needs but the stating to prove its truthfulness, as is seen every day. The time was when merchants educated their own help, but now they demand efficiency when employing.

The faculty of the college is made up as follows

- C. T. Miller, principal and lecturer on book-keeping, actual business, correspondence, commercial law, penmanship, arithmetic, etc.
- L. L. Tucker, teacher of book-keeping, commercial law, correspondence, penmanship, arithmetic, etc.
- C. D. Clarkson and A. L. McClosky, teachers of actual practice, arithmetic, correspondence, commercial law, penmanship, etc.
- J. A. Beecher, Esq., (of the Newark Bar), lecturer on commercial law.

Gustavus Fischer, A. M., teacher of German.

Miss Mamie E. Dolan, teacher of phonography.

No other school in the city is so advantageously located. All the street car lines but one, pass the door, or are less than a block away, and all the principal depots are within short walking distance.

In the immediate vicinity are the leading banks and insurance companies of the city, and the principal business houses are close at hand. The Board of Trade of Newark occupies a portion of one of the College buildings. It is believed that the presence of so many and such important interests cannot but have a beneficial influence.



C. C. MILLER, PROPRIETOR AND PRINCIPAL



ATEW ON BROAD STREET, LOOKING NORTH, AND SHOWING COLEMAN NATIONAL BUSINESS COLLEGE BUILDING.

THE COLEMAN BUSINESS COLLEGE.

THE name of Coleman is an ever familiar one in the banks, insurance and business offices throughout the city and State, and few men as educators deserve a better need of praise than that which falls to Mr. Coleman from the lips of thousands of

HENRY COLEMAN, PRESIDENT OF COLEMAN COLLEGE.

business men who are recipients of his favors in the young men and women whom he has educated and who are holding important positions as secretaries, accountants, book-keepers, clerks, etc.

To Henry Coleman has been imparted that pecuhar gift by nature which is vouchsafed to few, that is the faculty of inspiring others with the belief when teaching that he not only has a perfect knowledge of what he proposes to teach, but knows just how to impart it to others.

More than thirty years of his life has been spent in imparting business learning to that class of our young people who years ago would have spent quite treble the time in getting the like information by practice behind the counter, close applied desk work, and bitter hours of disappointing toil. Prof. Coleman stands at the head of one among the largest and best Business Colleges in the country. It is located at 832 to 842 Broad street, in elegantly fitted up rooms in what are known as the Central Railroad Buildings. The College bears his own name, and here gather during each year hundreds of pupils who are in pursuit of business learning. In carrying on the College he is assisted by a corps of teachers, all of whom he has drilled in his own peculiar methods, that his ideal institution may be kept up to its high standard and fully abreast of the times. It has all the necessary books and papers, and all the paraphernalia of a first-class Business College.

It is just such institutions as this over which Prof. Henry Coleman presides, which has given the city of Newark its advanced place as an educational centre.

Young men or women who have either a business, mechanical or scientific turn of mind, can now find in this rapidly growing city and its wonderfully attractive environments as fine opportunities as any place offers in the country in which to get an education. A place in which are the homes of the greatest of the world's electricians, and where are located the workshops for the construction of the births of their marvelous genius.

DR. CHARLES F. KRAEMER, SCHOOL COMMISSIONER.

Public Schools.

THE public schools are open to all. No distinction is made in birth, place or station, race or color. High and low, rich and poor, black and white, are alike invited to come and partake of the rich educational feast kept continually spread in all sections of the city, in the very best public school buildings ever erected, and supplied with a full corps of carefully selected teachers and assistants. These schools are under the control of the Board of Education, who are selected from among the people of the several wards for their peculiar adaptability for the position. On the selection of men for positions of School Commissioner there is in all probability a greater care exercised than



PRINCIPAL HENRY I, DOUGHERTY,

for the weal or the woe of a com-

an influence. The State, in the

children, supplies the money with

Board of Public Instruction for the providing the fuel in the cold win-

warm, in which are gathered the

and Republic. How passing strange

who stoutly object to being the

from these educational institutions,

the fact and although the education

law compelling the attendance of

and beautiful benefits needs change.

be recognized more easily than that

sented the old Tenth, now the

which time he was very active in

and served on some of the most im-

The Eighteenth Avenue Public

for membership in any of the other governmental and executive bodies of the city. This is as it should be, for there is no position that a man can be called on to fill requiring a better judgment or more decidedly careful reasoning or acting. Nor are there any with

results more far-reaching. Either munity, has no institution so grave exercise of its fraternal care for its nustinted hand through the State purpose of paying the teachers and ter months to keep the buildings future citizens of the city, State it seems that there should be those recipients of the blessings flowing and such it is regretful to state is of the children is compulsory, the those who refuse its far reaching

Few likenesses in this book will of Stacy B. Rittenhouse, who repre-Second ward, for four years, during the conduct of public school affairs portant committees of the Board. School was erected in 1871, and

EIGHTEENTH AVENUE PUBLIC SCHOOL,

opened the same year, as a primary school, under the principalship of J. Ward Smith. It comprised eight classes and with the Morton Street School was equal to the demands of the ward. At present, with a registration of 1,284 as per last report, it is but one of four populous schools, the Morton

STACY B. RITTENHOUSE

Street, Monmonth Street and Waverly Avenue schools, which are taxed to their utmost, to meet the requirements of the wonderful growth in population of the old Nineteenth ward. In 1873, the school was enlarged by the addition of a great "T," which extended to and fronted on Elizabeth avenue. It was then made an intermediate school with seventeen classes. Principals Schulte, Maclure and Kennedy were successively in charge until 1888, when Principal Dougherty, of the Walnut Street School, the present incumbent, was made its principal. Under his management it was advanced to the grade of grammar school, and it now numbers nineteen classes. It opened as a night school in 1891.



DR. ELY J. JANES, SCHOOL COMMISSIONER.

PARK PRESBYTERIAN CHURCH.

DURING the year 1848, sixty-one members of the First Presbyterian Church organized a religious society under the style of the "Park Presbyterian Church of Newark, N. J."

The first pastor of the church was the Rev. Ansel D. Eddy, D. D. Among the original and charter members are the names of many who are well known in this city, as Stephen Dodd, James H. Clarke, Humphrey B. Dunham, Richard Hall, Maria E. and Sarah E. Searing, George C. Dodd, Edward A. and Amanda Crane, Ezra Bolles, Benjamin F. Harrison, Charles D. Crane and many others.

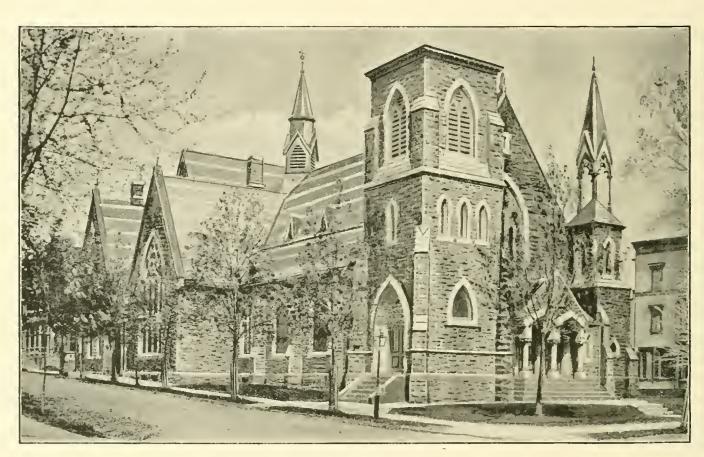
Among its earliest elders were Stephen Dodd, Otis Boyden,

October 6, 1874. Dr. De Venve resigned the pastorate in March, 1879.

In 1879 a mnanimous call was extended to Rev. J. Clement French, D. D., who had been pastor of the Central Congregational Church of Brooklyn for fourteen years, and of the Westminster Church of that city for five years.

Dr. French was installed as pastor of Park Church in October, 1879. At that time the membership was 164.

From the first the seating capacity of the edifice was too small for the attendance. In 1884 it became absolutely necessary to enlarge the building. On Sabbath morning, April 20, \$18,000



PARK PRESBYTERIAN CHURCH, BELLEVILLE AVENUE AND KEARNY STREET.

Richard Hall, David C. Dodd, Terah Benedict, Lewis C. Grover, Stephen R. Grover and William Ashley,

The session, in later years, has included Francis K. Howell, James S. Higbie, Stephen J Meeker, Dr. Edward P. Nichols, Elbert H. Baldwin, Edwin J. Ross, Joseph A. Hallock, Albert T. Freeman, James Mawha, William J. Rusling, Aaron King, Alexander Beach, Edward N. Crane, Elias F. Morrow, Edward E. Sill, Edward B. and George H. Denny, Hugh Haddow, Alvah W. Osmun and others.

Rev. Dr. Eddy was succeeded in the pastorate by Rev. Henry A. Rowland, D. D., Rev. James G. Hamner, D. D., Rev. Joel Parker, D. D., Rev. Prentiss De Venve, D. D., the last named of whom was influential in securing the removal from Park street to the present site of the church, in Belleville avenue corner of Kearny street.

The corner stone of the new building was laid May 22, 1872. The dedication sermon was by Rev. William Adams, D. D.,

were subscribed for this purpose, afterwards more. Work was at once begun. The chapel, Sunday-school rooms and the rear of the auditorium were taken down.

On April 20, 1885, the church building increased in its seating capacity to about 800, and changed in all its interior architecture and adornments, a new chapel, Sabbath-school rooms, primary department room, Bible class rooms, study and other necessary apartments, were complete and dedicated on the evening of that day.

In the autumn of 1886 it was resolved to extend the work of the church in some portion of the city more greatly in need of evangelical labor.

Careful survey of adjacent territory resulted in selecting the neighborhood of the stone quarries, on Mt. Prospect hill.

On the evening of October 8, 1886, the first neighborhood prayer-meeting was held at the house of Mrs. Sarah Phillips, No. 2001/2 Parker street, with an attendance of thirty. Weekly



INTERIOR VIEW OF PARK PRESBYTERIAN CHURCH, CORNER BELLEVILLE AVENUE AND KEARNY STREET.

meetings were held in private houses, with constant increase of numbers and interest, until it became necessary to rent a small public half on Bloomfield avenue. This place soon proving inadequate to the need, Park Church built and furnished, free from debt, and at an expense of \$5,000, a pretty little chapel on Aqueduct street. It was dedicated Thursday, Nov. 17, 1887. Prayer-meetings were held regularly, and preaching services occasionally, until in 1888, it was decided by the session that the chapel work required more constant attention and labor.

This work was given to Mr. Alfred Nicholson, of the Senior Class at Princeton, who is now the installed pastor of the church, which was duly organized under the style of "North Park Presbyterian Church," in October, 1890. It is still receiving some aid from the parent church, but is at present moving towards a change of site and the erection of a much larger and more elegant edifice on Parker street.

The membership of Park Church, at the time of the organization of "North Park," was between 800 and 900. About 150 members were dismissed to form the new organiza-

About 150 members were dismissed to form the new organization. The pew rentals of Park Church exceed \$10,000 annually. The Sabbath-school is limited only by the size of its accommedations.

A vigorous society of Christian Endeavor has been in existence for more than two years. The pastor has been, and still is, the president of the Essex County Christian Endeavor Union, having upon its roll between fifty and sixty societies, and over 4,000 members. He is also vice-president of the New Jersey State Union, with over 30,000 members.

In connection with his other work he also edits and publishes a little church paper, called "The Park Presbyterian Church Recorder," which is not only a complete weekly compendium of all the events and interests of the church, but contains briefest notes, comments, items of general information, and choicest extracts from the prose and poetry of the world. It is now in its sixth volume.

The Ladies Aid (Home Mission) Society sends valuable boxes of clothing annually to needy ministers and their families, besides other helpful work.

The Woman's Foreign Missionary Society aids in the support of a missionary in China. The Young Ladies' Floral Society supplies the pulpit with floral decorations every Sabbath in the year. A flourishing circle of King's Daughters is doing constant good to the poor and needy.

Dr. French is still the pastor, having completed his thirteenth year of service last October, 1892.



REV. J. CLEMENT FRENCH, D. D., PASTOR.

ST. JOHN'S CHURCH.

THIS unpretentious, yet beautiful edifice, located on Mulberry street, is a land mark, standing in an atmosphere of interesting memories. Its architect was the Very Rev. Patrick Moran, who was also the architect of St. Patrick's Cathedral and St. Peter's, of Belleville. It consists of the original church with a facade designed by Father Moran and the whole structure is built of Newark brown stone from the old quarry on Eighth avenue.

It is a pity that the data of the early history of this church are meagre, as it is the cradle of Catholic worship, not only in the city of Newark, but in the State of New Jersey. A rude hickory cross about six feet high, unstripped of its bark, surmounted the gable of the original structure and was the first emblem of salvation reared in this State, spreading its arms to all. The superstructure of the altar, is almost a fac-simile of the facade and is in heavy gilt.



The windows are of rich stained glass, with centre pieces of full length figures of saints. This glass has been for years the admiration of all people of artistic taste, who have visited the church, and was for several years the envy of all the other churches of the city. In the south tower are hung a chime of bells whose mellow notes have reminded many a worshiper of the famous bells of Shandon.

In 1824, the Rev. Gregory B. Pardow, of New York, organized under the patronage of St John, the association of Catholics who founded St. John's Church. It was designated St. John's Roman Catholic Society, of Newark, N. J. The first trustees were Patrick Murphy, John Sherlock, John Kelly, Christopher Rourke, Morris Fitzgerald, John Gillespie and Patrick Mape. Previous to the building of St. John's Church, the Catholics of Newark had met for divine service at a house on Mulberry street, occupied by one Charles Durning. The trustees set about erecting a suitable place of worship. Ground was purchased on Mulberry street and the erection of the church was begun in 1827. When the foundation was laid the trustees found that their funds were exhausted and they decided to have a committee wait on the Rev. Dr. Power, of St. Peter's Church, New York, to ask him to assist them in their work by delivering a lecture in Newark, for the benefit of the struggling parish. He cheerfully consented, and advised the committee to have the lecture early and well advertised. As there was no public hall in the town at the time, the committee were at a loss to proceed. This quandary was answered by the vestrymen of old Triuity Church in the park. At the suggestion of Rev. Dr. Power the committee had called upon them to ask the use of the church for the lecture. After due consideration the vestrymen unanimously granted the request of the committee without charge. On the appointed evening the lecture was given to a large audience which filled the church and was about three fourths non-Catholic, as at that time the Catholic population was very small. The proceeds netted over three hundred dollars, quite a sum of money to realize from such an occasion in those days. The liberal and generous action of Trinity has been and always will be remembered by the Catholic citizens of Newark. But through the baseness of one individual the money was lost to the young parish. The treasurer of the committee proved himself a veritable Judas, by making off with the entire



ST. JOHN'S R. C. CHURCH, MULBERRY STREET, 18.2

receipts and he was never heard of again. Let him be nameless. Under the untiring zeal and energy of Rev. Father Pardow the building was finished and dedicated to divine service in 1828. In the dedication ceremonies the Very Rev. Dr. John Power, who represented Rt. Rev. Bishop Dubois on the occasion, officiated. The cost of the building exceeding the estimate by a considerable sum, it was judged advisable to put the pews up at auction. The first pew to the right of the middle aisle brought forty-two dollars and the other pews brought smaller, but respectable sums. By this sale a handsome fund was realized and some of the more urgent bills of contractors paid. But there was still a large balance of indebtedness unpaid, and general stagnation of business ensuing, the trustees found themselves unexpectedly called on for payment and the church in danger of being sold. In this emergency good Bishop Dubois came to the rescue. Through his friend Bishop Bruté he secured a loan from the association for the propagation of the faith, with which the claims were paid, and from that time, 1829, St. John's parish prospered. The Rev. Gregory B. Pardow, the founder of the church, labored faithfully with the parish for eight years, and through his energy, tact and zeal, insured its success. He was followed by the Rev. Matthew Herard. October 7, 1832, and the Rev. B. Rafferty, October 13, 1833.

On November 3, 1833, the Rev. Patrick Moran was appointed pastor. He was eminently fitted for the place. He possessed good judgment, a refined and correct taste, and an educated mind. Under his management the affairs of St. John's advanced rapidly, dispite the panie of 1837, and the sterling qualities of their pastor continued to win for the congregation the confidence of their non-Catholic neighbors. Father Moran soon had a library of \$50 volumes in circulation. He organized church societies, literary, temperance and benevolent associations. He erected a school house and arranged for the free instruction evenings of such as could not attend the day school. But his chief source of pleasure and pride was in his Sunday-school, which he raised to a high degree of excellence. Connected with the Sunday-school was a teachers' association, which was a model of its kind.

Prior to the erection of the See of Newark, then comprising the entire State, New Jersey had formed part of the Diocese of New York. The late Most Rev. James Rosevelt Bayley, D.D., Archbishop of Baltimore, was appointed first bishop of the new diocese, and one of his first acts was to select Rev. Patrick Moran, of St. John's, to be his vicar-general. After the death of Vicar-general Moran, which occurred July 25, 1866, the following were successively rectors of St. John's Church: Rev. James Moran, nephew of the deceased rector, November, 1866; Rev. Louis Schneider, November, 1867; Rev. Thomas M. Killeen, who built the new rectory adjoining the church, November, 1868, and did much for St. John's



REV. J. P. POELS, RECTOR.



ST. JOHN'S SCHOOL, MULBERRY STREET.

Rev. Patrick Leonard was rector in December, 1878. Rev. Louis Gambosville, who personally and with great care and labor re-wrote the church's records of births and marriages from the foundation to his time, and who was the second incumbent to die (January, 1892); Thomas E. Wallace, administrator, from January, 1892, to February 27, 1892, and February, 1892. Rev. J. P. Poels, the incumbent. The assistant rectors were Rev. Fathers Guth, 1837; Farrell, 1838; Bacon, 1838; Donahue, 1845; Hanahan, 1846; Callan, 1848; Senez, 1849; Conroy, 1852; McGuire, 1853; Tubberty, 1854; Casted, 1858; McCloskey, 1860; Byrne, 1861; Moran, 1863; Wiseman, 1867; Rolando, 1867; Nardiello, 1876; Whelan, 1878; Corrigan, 1879; White, 1882; McGahan, 1892, and John A. Fanning, D. D., at present.

Rev. Father Poels, who is now rector of St. John's, is a man of great executive ability, and most zealous; and people who love the first Catholic church of Newark and cherish its memories, may rejoice that the parish has come under his care, for it already shows many signs of improvement and of renewed life. His administration has already been signalized by a marked advancement of church affairs and an entire renovation of the church property.

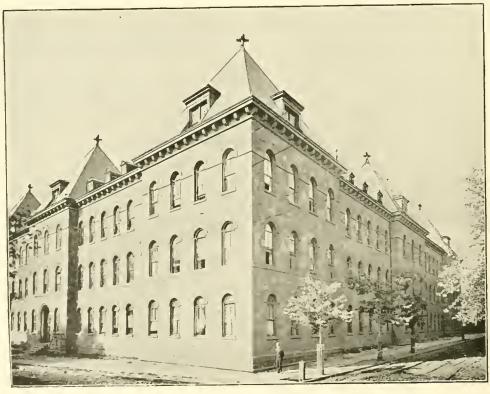
The history of St. John's is in very fact the history of Catholicity in New Jersey. The "mother of all the churches" of the diocese, from her sanctuary have gone forth several zealous and exemplary missionaries to propagate the faith, and among these may be mentioned Most Rev. Michael Augustine Corrigan, D. D., Archbishop of New York; the late Very Rev. James H. Corrigan, for several years vice-president of Seton Hall College; Rev. George W. Corrigan, of Paterson, and the Rev. Martin O'Connor, of Peoria, Ill.

ST JAMES CHURCH.

NE of the very successful parishes of the Roman Catholic Church is that of St. James, over which the Reverend P. Cody presides, was founded in 1853, from territory situate in what was then the Fifth, Tenth and Twelfth wards of the city of Newark. The church buildings are the finest in the city, are constructed of brown stone quarried from the hills near by, and prepared for the foundation walls and superstructure by Newark mechanics and skilled laborers. The large block of ground, upon which the beautiful church, hospital and school buildings stand, at the corner of Lafayette, Madison, Jefferson and Elm streets, was purchased by Father Senez, who was pastor of St. Patrick's at that time. This was in April of 1854. On the 19th of the following June, the Rev. Father B. F. Allaire, a son of the noted Brooklyn foundry man. having been placed in charge, the corner stone of the church was laid with very imposing ceremonies by the late Right Rev. Bishop Bayley. On the 17th of August, the same year, Rev. James Callan was appointed to the pastorate and on the 5th of November, the building of brick, two stories high was ready for occupancy, the lower story for church and devotional services and the upper for school purposes. Father Callan was a man of much culture, a fine orator and rhetorician, full of energy and untiring in his devotion to the work of the church. In 1861, Father Callan was transferred to Paterson. He had done a most meritorious work during his administration of the affairs of his charge and left the church clear of debt and prosperous. He afterwards met with a tragic death while traveling on a steamer between San Francisco and Sacramento, California, the boiler of which exploded and claimed this eloquent divine as one of its victims. The parish grew rapidly and when the Reverend Father John M. Gervais, who had been the assistant at St. Patrick's for two years previous came into St. James' as his successor, he found the accommodations entirely inadequate for the largely increased number of people who gathered there. Father Gervais was a man of strong character and was the possessor of all those characteristics which go so far toward making the true shepherd. Full of zeal for good works and for the growth and prosperity of his new undertaking, he set about the giving of fuller and better accom-



ST. JAMES' R. C. CHURCH, LAFAYETTE STREET.



ST. JAMES' SCHOOL, ELM AND MADISON STREET.

modations to his rapidly increasing flock of parishioners and worshipers. In July, 1863, Bishop Bayley, in the presence of a vast congregation of his parishioners, laid the corner stone of the new projected brown stone church building, 70x160 feet in dimensions and with such unwavering determination did he, Father Gervais, push the work. Such handsome sums of money did his magnetism draw to the cause, and with such readiness did all his parishioners respond to clarion calls, the handsome and imposing church structure was ready for dedication and on the 17th day of June, 1866, in the presence of one of the largest congregations ever assembled in that section of the city, the dedicatory services were conducted by Bishop Bayley. The late Alderman Nicholas Moore will be remembered for his generous contributions and his final munificent bequest to the parish. So untiring was the zeal of Father Gervais, and with such a mighty spirit and determined purpose did he enter into his work of increasing the strength of his parish, that everything went forward as if there were, indeed, no obstacles to overcome. Often could Father Gervais be seen helping on the construction with his own hands. Like many another he overworked, and on the 24th of July, 1872, Father Gervais went to his reward.

After the death of this combination marvel of priestly force and progress, with the strength of a giant, and the tenderness of woman, and a child-like simplicity, it was decided to drop out of his purposed buildings and improvements, the great iron convent, two hundred feet square, and carry to completion the hospital alone of the great structures he had planned to build on the same block with the church and school. The munificent bequest of Nicholas Moore had been used in the construction of the fine brown stone hospital building, which at the time of Father Gervais' death had only reached the heigth of its first story. His assistant, Rev. M. E. Kane, took charge of the parish work until the appointment of Rev. P. Cody, in January, 1873, the pastor who has devotedly conducted the good work ever since. Under the guidance of this faithful priest the unfinisbed buildings have been pushed forward to completion, and all the parish work has been conducted in accordance with the very best and most approved methods and accepted ideas. Father Cody has completed the tower of the church with the spires and minarets, and has had placed in the tower a beautiful chime of bells, ten in number, the larger weighing



ST JAMES' HOSPITAL, ELM AND JEFFERSON STREET.

over three thousand pounds. The stone building which he has completed is now occupied as the rectory, and the parish schools and convent for the sisters and the hospital. The school is under the care of the sisters of charity, and competent male teachers are employed for older pupils, and both departments are in excellent condition. The hospital, with accommodations for 100 patients, is ready for occupancy and will fill a long felt want in this section of the city. The parish contains between five and six thousand souls. There are four regular church services and masses on Sunday. The church has a seating capacity of about 1,500, and is furnished with one of the best organs in the State of New Jersey and is supported by a volunteer choir of sixty voices. The young men of the parish have

a fine building of their own on Ferry street. They have a membership of 150. The purpose is athletic and social. Father Cody looks after the educational interests of his parish with great care and has obtained results which are indeed remarkable. The merits can best be judged by comparison. In the spring of 1873, there were 250 children in the school, which Father Cody increased to 800 in the fall. He placed the sisters in charge of the girls and employed a competent male principal for the older boys and at once made the schools free. They now number 1,200 pupils. He also established a school in St. Thomas' building, Chapel street, near the steel works, and when that portion was set off as the parish of St. Aloysius in 1879, it had a flourishing free school of 400. St. James has ever been ready to extend a helping hand to weaker parishes or those in trouble or straitened circumstances. It will be remembered to the everlasting credit of Father Cody and the parishioners of St. James', that when the Orange parish was involved, they came to their rescue with a magnificent donation of five thousand dollars, giving immediate relief, which acted as an incentive to other parishes and churches to assist and resulting in the saving of this church edifice. Indeed, St. James is one of those parishes, and Father Cody is one of those pastors, who live by the golden rule and never let "the left know what the right hand doeth." The beautiful photo pictures and pen sketches of this, one among the grandest church plants in America, which so graphically speak for the reality in this book of our latest day art treasures as seen on the pages thereof, cannot but be satisfying to all who have an eye for the beautiful and good. The brick building, corner Lafayette and Madison, was the first constructed, is still standing and is occupied as a parish hall in which entertainments are held, and contains a fine large room in which the parish circulating library is shelved. This library contains more than 1,500 volumes

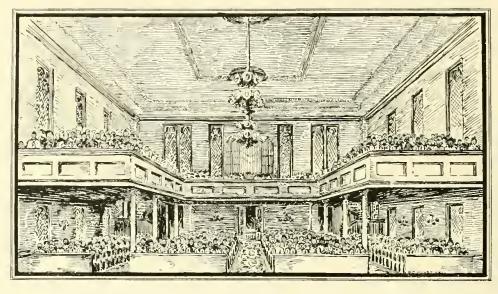
of well selected books and is largely read. The several societies connected with the church have their meeting rooms in this friendly old structure, and it holds a warm place in the affections of the people, many of the older members of the parish looking upon it as a true friend of their youth and as one of the land marks of their journey now drawing to its close.



REV. P. CODY, RECTOR.

FRANKLIN ST. M. E. CHURCH

PRANKLIN STREET METHodist Episcopal Church is one of the venerable institutions of Newark. It is the oldest Methodist Episcopal Church in the city save one. It will soon have attained its three score years-years of many vicissitudes and victories. These victories were neither architectural, ritualistic nor artistic. They were of an infinitely higher order. They were victories in the realm of thought, feeling and character. Achievements that dealt rather with the soul than the body; with the real self rather than the seeming self. Many thousands have been turned from death to life; from woe to joy, in this historic fortress of Methodism. Many look down from their abodes in



INTERIOR VIEW OF FRANKLIN STREET METHODIST EPISCOPAL CHURCH.

heaven upon this church as the blessed place where they received the re-birth which fitted them for fellowship with their Father and their God, and which through his maturing love, has prepared them for their present abodes of blessedness. But not only have the soul-saving ministries of Franklin Street Church prepared many who have gone up, but many who have gone out. Occupying a central location, she has sent her streams of converts to every Methodist Church in Newark. There is not a Methodist Church in this city but would be shorn of much of its strength if the help that Franklin Street in this way has given, were withdrawn.

Franklin Street M. E. Church has been favored with the pastoral services of some of the most magnificent men in Methodism, as the mighty William P. Corbit, the noble and eloquent Dr. Bartine; the sweet singer of Israel. James O. Rogers, and others of kindred excellence, and, while appreciating the eloquence and magnetic gifts of these men, yet it is pleasant to be able to truthfully state that for great congregations; for the noble ability and loyal working power of her rapidly increasing membership, this church was never up to what she is now. The fact is, the evening congregations, as a rule, are so large as to raise the inquiry, "Oh, where shall there be room for all who want to hear." There is considerable serious quiet pondering going on as to how to enlarge the building to a capacity of 3,000, and so found a great Methodist people's church in Newark. If some rich citizen should have wisdom enough to lay up a quarter of a million in heaven by way of Franklin Street Church, the burning problem would be solved. Newark would be benefited and the giver would be that much richer forever. There are several factors contributing to the unprecedented success at the present time. The church has been renovated, recushioned and electric lights put in; a new series of specially selected hymns of the finest that can be found, are published annually; the audience rooms are clean, cozy, airy, warm and inviting; the singing is pro-



REV. JAMES BOYD BRADY, B. D., D. D., Ph. D., PASTOR.

nounced the best. Then comes the organizer of these factors of force into their present aggressive and captivating form, the Pastor himself-He is probably the most talked of preacher in Newark, because he strikes fearlessly at modern iniquities, and lives for the people of these times and this place. Paradoxical though it may seem, he is one or the most conservative and vet one of the most progressive of men. His liberal education and world-wide travel give him a view of things and men, and motives, and principles, that are comprehensive and quite peculiar to himself. He stands for essentials but tears down obstructions. He pursues his own diplomacy and calls no man master, although he consults with his official brethren. "The Sængerfest Sermons" and "The Repulse of Anti-Christ" are specimens of his clean-cut, fearless oratory. He is a man of the people, and when roused in their behalf in the pulpit, he springs on his victim like a lion rushing on the prey. In response to his sympathy and uncompromising loyalty to their cause, they crowd his church to feel the warm glow of his heart. Men who will go nowhere else, hear him gladly, and so hundreds have been lifted to a new life by his ministry, while thousands upon thousands have been lifted to nobler habits of thought, feeling and action. He has had invitations to large, rich and influential churches outside of his Conference, but on account of the opportunity accorded of doing good to the people of Newark, he clings to Franklin Street Church with the love of a David for a Jonathan. He puts old things in new ways. He appears in his pulpit like a new man with a new message, pouring reasons for its acceptance in so fast from all directions that resistance finally becomes impossible. He will not acknowledge anything worthy in himself, but affirms that all his successes are the fruits of the Holy Ghost. The prayers of all the saints are requested for continued blessings in unstinted measure upon the Pastor and People of Franklin Street Church.

CHARITABLE INSTITUTIONS.

O CITY in the world can present a cleaner record than this centre of multitudinous industries, when duty to the sick and the afflicted is presented for consideration. When the call

for relief comes up from the unfortunate, the poor, the sick, or afflicted, however feeble the tone, it is not only quickly heard, but immediately heeded. While the people of Newark have had the opportunity to study charity in all its beautiful details and tender bearings, they have taken advantage at every turn to put that theory learned into practice. The lessons acquired in the schools of good fellowship, love and duty, have been but the sowings prior to the reaping, and the ingathering of a bountiful harvest.

No pleasanter task has it been our lot to perform than this, of placing upon the record the beautiful deeds of the Little Sisters of the Poor. These eminently pious and holy women never slacken in their efforts to



INTERIOR VIEW OF THE FIRST PRESBYTERIAN CHURCH DURING CENTENNIAL CELEBRATION, 1891

relieve the distressed and suffering; feed the hungry, succor the destitute, clothe the naked, and like the fire-fly, whose bright flashes lighten the nights, these devoted women are flittering everywhere, dispensing their benizens of love. These humane people began their charitable work in 1878, with the special object in view of founding a home and providing relief for the old. destitute and sick of both sexes. The home which they have provided for the aged, who through sickness or the infirmities of age, are unable to provide for themselves, and where they are kindly cared for and made comfortable in their old age, is an imposing brick structure, large enough to comfortably hold two hundred. This building, within the walls of which is found so much of comfort for the old and afflicted, is seen in the lower left hand corner of the beautiful full page combination illustration accompanying this



INTERIOR VIEW OF ST. ALOYSIUS CHURCH.

article. The Little Sisters of the Poor are now deeply in debt, but they trust in God and the well-known liberality of the benevolent population of Newark and the State of New Jersey to help them in their charitable undertaking. They are always pleased to meet visitors, but they prefer their coming from 2 to 4 o'clock in the afternoon. The Roseville horse cars pass the door.

Few among the public institutions of Newark do a more thoroughly good and beneficient work, or one more lasting than the Free Public Library, which has its home in the building known as Park Hall, situate on West Park street, the same having been remodeled to suit the conveniences of the library trustees and the housing of the rich literary treasures.

If it were one thing more than any other which demonstrated the growing independence of Newark, and the wonderful self-reliance which she has been showing of late, it would be the large number, growth and grandeur of her eleemosynary institutions. Her close proximity to New York city acted as a stay to her progress in the establishment of such institutions, the doors of those of the great commercial metropolis of the western world, standing wide open to pass. Among the first to cast away from these sisterly leading strings was St. Michael's Hospital, which is but little more than a quarter of a century old, but had already to its credit on January 1, 1890, 23,890 patients treated. St Michael's Hospital is the largest in the city, is centrally located at the corner of High street and Central avenue, it has 300 beds and all the necessary accessories and paraphernalia of a first-class hospital. While the hospital is under the protection of a board



ST. MICHAEL'S HOSPITAL, CORNER HIGH STREET AND CENTRAL AVENUE.

of directors at the head of which is Bishop Wigger of this diocese, the institution is managed entirely by the Sisters of the Poor, of St. Francis, twenty-three in number, at the head of whom, as superior, is Sister Ephrem. As the thousands who have felt the effect and enjoyed the blessings of their beneficiency and care, a more devoted and holier set of women are nowhere to be found. In the reception of patients and in their care and treatment no distinctions are made. The medical gentlemen connected with St. Michael's Hospital are Dr. William Pierson, medical director; Dr. Joseph C. Young, Dr. H. C. H. Herold Dr. J. Few Smith, Dr. James T. Wrightson, Dr. Charles D. Bennett, Dr. Robert L. Burrage, Dr. George O'Gorman. Dr. Joseph C. Young, is president of the medical board. The house staff consists of a corps of nine medical gentlemen. Connected with St. Michael's are four special departments, where diseases pertaining to each class have special care and treatment. Dr. T. F. Sutphen is at the head of the eye and ear; Dr. Joseph Few Smith, the dermatological; Worthington Pinney, D. D. S., the dental departments. The consulting surgeons of the women's hospital



ST. BARNABAS' HOSPITAL, CORNER HIGH AND MONTGOMERY STREETS.

branch are Drs. Pierson, Holden, Ill and Ballery, with assistants Drs. Charles I. Ill, W. E. Carroll and Emil Guenther. The manner of building of St Michael's Hospital can be seen by a reference to the beautiful picture herewith shown.

The Hospital of St. Barnabas was the first working hospital established in New Jersey under legislative authority. The work was begun in 1865, in a small house on Wickliffe street, and the hospital was incorporated February 13, 1867. The incorporators were Bishop William Henry Odenheimer and the rectors and certain laymen of the several Episcopal churches of the city. The charter declared the purpose of the incorporation to be the care, nurture and maintenance of sick, infirm, aged and indigent persons, and of orphans, half orphans and destitute children, the providing for their temporal and spiritual welfare, and the providing or erecting a suitable building or buildings. In 1867, it received the gift of a building on the site where St. Stephen's Church now stands, at the corner of Elizabeth and Clinton avenues, and in 1870, the trustees purchased the house and land on

the corner of High and Montgomery streets, and on this property the work has been carried on ever since. In 1885, the greater part of the present large brick building, shown in the illustration, was erected at a cost of over \$40,000. The chapel and rooms for the sisters in charge and private patients were added afterwards. The hospital is under the best medical and surgical supervision, and in its equipment and appliances, it affords the best resources for dealing with cases of casualty, disability and sickness. Besides the medical and surgical wards and the children's ward, there are rooms for private patients and a clinic or department for the relief of persons not living in the build-The administration of the internal affairs of the hospital has been since 1881 under the charge of the Sisters of St. Margaret, who without other reward than the delight of doing good, devote their lives to this work. The hospital has a small endowment fund and receives \$2,500 a year from the city for the support of certain beds, but it is almost wholly supported



CITY HOSPITAL, CORNER CAMDEN AND NINTH STREETS.

by voluntary contributions made from time to time, and money raised by the efforts of the ladies' society, called the Guild. The number of patients treated within the hospital each month is about one hundred and the out patients receiving relief, number about five hundred. It is open to persons of every creed and nationality, and it is impossible to overestimate the good work it has done.

Never behind in good works, the city of Newark has marked an era in their progress by the establishment of a hospital, where the sick and afflicted may go and seek rest, and take deep draughts from the overflowing cup of healing balm, which will be held to their lips by the devoted hands of trained nurses, directed by the understanding and skill of the wise, pure and self-sacrifcing among our best physicians and surgeons. Although Newark was blessed with several good hospitals, yet the best thinking and more charitably disposed among our citizens decided it not unwise that another hospital, where the sick might obtain relief, should be established. Fortunately the county asylum buildings, which had been erected on city property, were vacant and apparently waiting for just such a blessed purpose and innovation. So as the people's representatives in the Common Council were ripe for the movement, the die was soon cast and the hospital established. This beneficent institution was opened for the reception of patients in 1882, and incorporated in 1883. Since that time its doors have been wide open to the indigent sick of all nationalities. The hospital is managed by a board of directors, who meet once a month. From the directors a visiting committee of three members is selected to look after the executive work during the intervals. The hospital staff consists of Surgeons Dr. Peter P. V. Hewlett, Dr. Charles Young, Dr Archibald Mercer and Dr. L. E. Hollister; Physicians, Dr. E. F. Smith, G. R. Kent, H. C. Hendry and with resident house physician and surgeon. A training school for nurses is connected with the hospital, of which Miss Louisa Moss is principal. The City



GERMAN HOSPITAL, CORNER BANK STREET AND WALLACE PLACE

Hospital, as will be seen on this page is just such a building as appears to excellent advantage, as it takes a place among our illustrations.

Few institutions in Newark stand higher on the eleemosynary roll of honor than that which is known as the German Hospital, located at the corner of Bank street and Wallace place. The German Hospital was incorporated under the laws of the State of New Jersey, on the 13th day of February, A. D., 1868, and has consequently been in operation over a quarter of a century. The distressed and suffering have for years found relief within its wide open doors. It is conducted on the very broadest principles of relief to the suffering, and its philanthropic purpose is seen in every move of its conduct. On the medical board and surgical staff of this hospital are professional gentlemen of the highest standing in the city. These self-sacrificing of medical profession are E. Gunther, president; V. Nager, secretary; Charles I. III, treasurer; Dr. Edward III, R. P. Diefenbach, C. I. Kipp, H. Kornemann, E. F. 1 Lehlbach, Charles Lehlbach, Charles Lehmacher,

H. Sudman and Fred Rexamer. Dr. Telger, home physician; John Storz, superintendent; Mrs. Storz, matron. Mr. H. F. Seiger is president of the board, F. Goehring is vice-president, Julius Stapff, treasurer; Hugo Fraentzel, financial secretary, and A. A. Sippel is secretary, with Directors Gottfried Krueger, H. Kreiler, Emil Schamacher, Moses Strauss, Elias Berla and Christopher Miller, A. A. Sippel, H. Freitzel and John Goehring constitute the executive board.

An institution altogether lovely, and one which is dispensing its benizens of home comforts to the aged and helpless poor of the city of Newark, has its Lares and Penates set up in the capacious structure, situate on Avon avenue in the northwestern section of the city, and known as the Krueger Pioneer Home for Aged Men, and so named in honor of its donor, Judge Krueger. Among the charitably inclined of the citizens of Newark, there had long been felt a pressure which was growing



CENTENARY M. E. CHURCH, CORNER SUMMER AVENUE AND KEARNEY STREET.

mightier as the seasons and years passed of a necessity existing for a home for aged men. It was not till 1889, that the long existing thought took shape and the long theme of relief culminated in the organization of the association and the building of the home. This institution is governed by a board of directors selected from among its patrons and friends.

Among the oldest of the charities for which the city of Newark is justly noted, is that of the Newark Orphan Asylum Association which has had the care of thousands of children who have grown up to be useful members of the community in which they live. The Newark Orphan Asylum was organized in 1848, and has its building, which is a beautiful and imposing structure, an ornament indeed, to any city, at the corner of High and Bleeker streets. It is under the care of women entirely and is managed by them solely. They receive orphans and half-orphans from two to ten years of age, and are pleased to receive visitors every Tuesday and Friday.

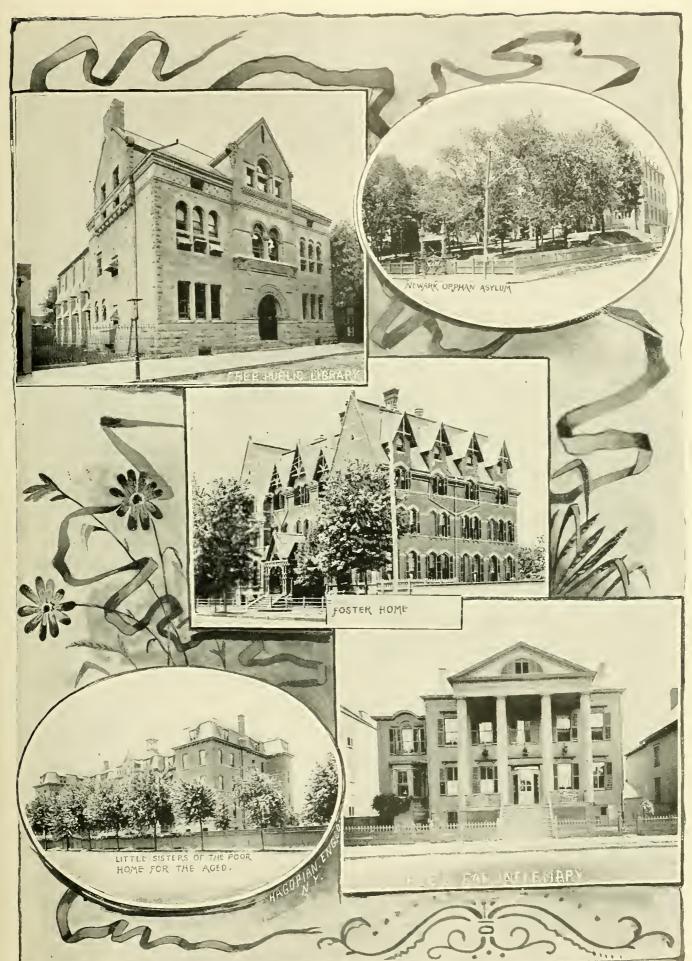
Last though not least, of the five beneficent institutions which our artist has brought out so beautifully in his combination picture which illustrates a full page of this book of art is the Foster Home, which occupies the centre of the page and shows with marvelous clearness the architectnal grandenr of the building, where so much of comfort is meted out to the unfortunate, who pass the early years of their life within its portals. This home is situate at No. 284 Belleville avenue, in the northern part of the city and is easy or access from all sections. It is worth a visit at all times to see the smile of contentment play over the faces of the little ones.

The Newark Charitable Eye and Ear Infirmary was founded February 1, 1850. It was located at first near the northwest corne



KRUEGER PIONEER HOME FOR AGED MEN, AVON AVENUE

High street, surrounded by a large tract of land. During the year 1881, it was moved to its presen location, No. 60 Sterling street Its object is the gratuitous treat ment of the poor, for diseases o the eye, ear, nose and throat. I has an out-door and a hospita department. The dispensary i open for diseases of the throat in the morning and for eye and ea in the afternoon Up to date 49,500 patients have been treated for the eye and ear and 2,783 fo throat diseases. During the las year there were almost 200 treated in the wards. The property be longs to the association, but there is a heavy mortgage on it. Th instution is supported by volun tary contributions and a smal donation from the city. A strik ing illustration of the infirmar building is seen in the combina tion picture, occupying the lowe right hand corner.



THE DAILY ADVERTISER AND THE SENTINEL OF FREEDOM.

THERE are not many publications of their kind in this country better known than the Daily Advertiser and the Sentinel of Freedom. The first issue of the latter publication was sent out on October 5, 1796, and was the beginning of the second Newark newspaper. Daniel Dodge was the printer and Aaron Pennington the editor, and the records of that day announce that the office was the old First Church building, near the Court House. It was an ambitious paper, and made such headway that one year from its foundation it was enlarged and embellished to such an extent that Messrs. Pennington and Dodge placed their names as the responsible publishers and felicitated themselves and their readers on the "gayety of attire" which it donned with its first birthday.

proprietors. In his long control of the newspaper Mr. T. T. Kinney developed rare acumen as a conductor of a really great journal, and built up a property which ranked with the rich periodicals of the United States. In Oba Woodruff he had an assistant familiar with his superior's mental and business trend, and master of all the nice details of management. Mr. Woodruff went into the office of the Advertiser when barely fourteen years old, and died in the service of the journal he had worked for so long and so zealously. His death occurred in 1892, and few Newark men have been so sincerely and widely regretted. He was known to thousands through the Advertiser, and his connection with the Board of Freeholders as its clerk for twenty-four



In October, 1799, the publication passed under the control of Jabez Parkhurst and Samnel Pennington. On January 1, 1800, the proprietorship changed again, Mr. Parkhurst's interest being taken by Stephen Gould. The latter retired in May, 1803, and Mr. Pennington in November of the same year, the Sentinel of Freedom then becoming the property of William Tuttle and John Pike. In 1804 Mr. Pike dropped away and the firm was known as William Tuttle & Co. until the periodical was sold to the Daily Advertiser, and merged with which as its weekly edition it has since remained.

The *Daily Advertiser* was first issued in March, 1832, as an exponent of Whig principles, and was a sturdy advocate of Henry Clay and his protective tariff policy. As the first daily newspaper in New Jersey it achieved prominence rapidly, and under able conduct had great weight in political affairs. After the fever of the political campaign was over the newspaper passed into the hands of Mr. William B. Kinney; from him went into the proprietorship of Mr. T. Kinney, and thence to its present

years, gave a still more extensive acquaintance. Another of the able men who gave prestige to the paper was the late Sanford B. Hunt. Of broad mind, thoroughly read, with a style always graceful, sometimes pungent, never weak, he ranked as a writer with the foremost editors of his time. At the death of Dr. Hunt the chief editorhsip devolved on Noah Brooks, now the principal writer of the paper and a worthy successor to the man whose chair he fills. Mr. Brooks is known the country over as an editor of experience and a vigorous writer.

The illustrations which accompany this sketch are portraits of men who have made the *Advertiser* famous, and the design gives an idea of one of Newark's literary features.

The Advertiser is old, but it is a potential factor in the progress of the city, a conserver of public morals and a magazine of news covering civilization. Recently it changed its form, and the familiar aspect of the paper was lost, but in its new shape it still wins its way, saving all that was good of the old and adding new force and new laurels to its renewed youth.

THE NEWARK EVENING NEWS.

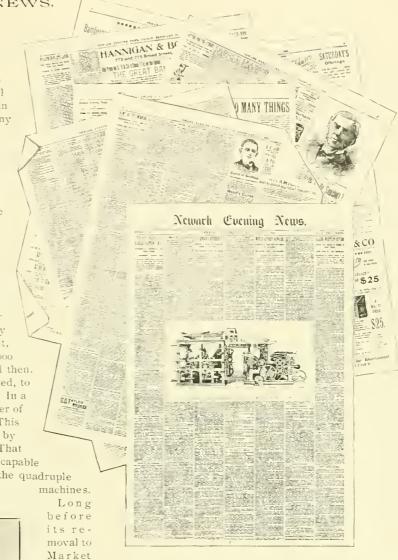
SINCE its first issue, September 1, 1883, the record of the Newark Evening News has been one of constant and rapid growth. Starting with an edition of about 3,000 copies, run off on a little press capable of printing only one side of 3,600 sheets an hour, the paper has in ten years attained a daily circulation of 33,000. This is far more than twice the largest circulation ever attained by any

other New Jersey daily newspaper.

In the tenth year of its wonderful career the owners of the Evening News purchased the fine double building at Nos. 215-217 Market street, nearly the whole of which is devoted to its use. Here it has an equipment by far surpassing that of any other New Jersey newspaper. Each of the two great quadruple Hoe presses, made to the order of the publishers, is capable of printing, cutting and folding 48,000 six or eight page; 24,000 ten, twelve, fourteen or sixteen page; or 12,000 twenty, twenty-four or twentyeight page papers an hour.

This splendid press room equipment is the fifth put in to meet the necessities imposed by the growth of the News. The little press first put up in the cellar of the building, No. 844 Broad street, proved in a very few months inadequate to meet the demands upon it, and was replaced by another with a capacity of 12,000 copies an hour. Only four-page papers were printed then. it being necessary, when eight-page ones were needed, to print two sheets separately and fold them together. In a year or two this press was in turn replaced by another of double its capacity, and using stereotype plates. This soon proved unequal to its duties, and was followed by still another, the capacity again being doubled. That press, the last used in the Broad street building, was capable of only half the work which can be done by each of the quadruple





street, the News had outgrown its old quarters. Additions had been made to the building, No. \$44, and the upper floors of the one adjoining, No. \$46, had been leased and used. In the Evening News building all the departments of the paper find ample accommodations.

Closely connected with the press room is a complete stereotyping apparatus. The presses are run and power for other work is furnished by a double fifty horse power engine. The building is lighted throughout by electricity, the entire plant being owned and operated by the News.

The number of men employed in the composing room of the News is far in excess of that working on any other New Jersey newspaper. In all its departments the same fact holds good. It does more work and employs more men to do it than any of its State contemporaries.

From the beginning the Evening News has been under the same management. Wallace M. Scudder is the publisher and Henry Abbott Steel is the editor. They started the paper and have been in constant charge of its affairs. William Hooper Howells is the manager of the advertising department, which has fully kept abreast with the paper's growth in circulation and influence. Rusell P. Jacoby was the first city editor. The editorial, reportorial, business and mechanical staffs are large and are directed by the men who founded the paper.

The Evening News is a newspaper pure and simple. It is entirely independent in politics. It has no social, financial or political axes to grind, no interests except those of the public to serve, and no entanglements to make it negligent to those interests or untrue to them.

NEWARK EVENING NEWS BUILDING.



NORK that is in any way descriptive of the Newark of to-day would be complete without something more than a passing allusion to that bright and welcome weekly visitor, Town Talk. The people of Newark are practical, every day, common sense, business folks, not inclined, as a rule, to be over enthusiastic, but as regards Town Talk there can be no question or doubt of the interest they feel in it. Why is this? Because, weekly it comes to please their senses by its handsome artistic appearance, which is not surpassed by any similar publication in the country, to drive away dull, carking care with merry jest and funny illustrations, to keep them posted with regard to the happenings of society, of the matrimonial events that have transpired or are to come, of music, the drama, the various sports, in short, because it is thoroughly and intensely Newark in every way. Its success

has been phenomenal, and far greater than its projectors even dared to hope for, and it never passed through the vicissitudes which so many of the barks launched on the sea of journalism experience. On the contrary, its first issue was received with the greatest favor, and the passing years have served to enhance the high opinion in which it is held by the people of Newark. Fearless, entertaining, with fresh, crisp, humor, the brightest of illustrations and the most trenchant of comment on matters of local interest, it is conducted with marked ability in every department, and its immense popularity and ever growing circulation bear the best evidence that its high standard, literary merit, and advanced ideas are appreciated by the community at large. It was established March 15, 1890, by Messrs, S. R. and Wm. A. Baker, its present editors and proprietors.

THE BOARD OF TRADE.

INGULARLY enough, the Board of Trade of the city of Newark, a great manufacturing

city, is of comparatively recent origin. It was not until the year 1868 that the first steps toward its organization

were taken. February 20th, of that year, a call was issued to the merchants and manufacturers of the city to attend a meeting, to be held in the old Library building, on Monday, February 24th, at 7.30 P. M., "to consider the propriety of organizing an association or Board of Trade in this city." In pursuance of that call only sixteen gentlemen assembled. These were: General N. N. Halstead, James R. Sayre, Jr., Henry W. Duryee, Henry Hill, Moses Bigelow, Thomas W. Dawson, C. Harrison Condit, George Peters, William H. McClave, Isaac Gaston, Phineas Jones, Orson Wilson, G. N. Abeel, S. R. W. Heath, Thomas Sealy and William 11.

General Halstead was chosen chairman, and Colonel Abeel secretary of the meeting. The

secretary of the meeting. The following resolutions were presented by Mr. Hill, duly seconded

a great manufacturing Thomas W. Dawson; Vice-presidents, General N. N. Halstead,
Moses Bigelow, Theodore P.
Howell; Secretary, Col. Gustavus
N. Abcel; Treasurer, Isaac

the following gentlemen were elected unanimously President.



MONUMENT OF SETH BOYDEN, FRECHED IN WASHINGTON PARK-BY THE BOARD OF TRADE.

and unanimously carried:

"Resolved, that we do hereby organize ourselves into a Board of Trade in the city of Newark."

Committees were appointed on constitution and by-laws, on permanent organization and on permanent headquarters,

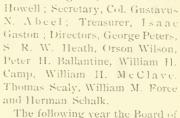
On the 17th of March, 1868, a meeting was held to complete the organization, and a committee was a ppointed to nominate officers. The election was held March 21st, and

which has already demonstrated its value and importance in the industrial prog-

ress of the city.

By the Board's energetic action and advocacy a n appropriation was secured from Congress for the erection of a new United States Custom House and Post-Office building worthy of the growing size and importance of the city. It is also largely due to this Board that the railroad fares between Newark and New York were

One of the first things taken up by the new body after



The following year the Board of Trade was incorporated by an act of the Legislature of New Jersey. Since its organization the Board has always been active in all matters and measures likely to effect and advance the best interests of the city. As far back as 1873 it began to advocate the obtaining of a new and better water supply for the city, and it has been largely instrumental in securing the splendid supply of pure water in which the city now rejoices.

The Board of Trade began the agitation which finally aroused the citizens to the necessity of a free public library, and culminated in the establishment of a library which is the city's joy and pride.

It was also mainly instrumental in raising a fund to endow and earry on the Technical School



ALLEN LEF BASSETT, PRESIDENT



SAMUEL ATWATER, FIRST VICE-PRESIDENT.



JOHN B. STOBAEUS, SECOND VICE-PRESIDENT.

its organization was the improvement of the navigation of the Passaie River. 1n 1565 a memorial was sent to Congress asking for an appropriation for that purpose, and in 1874 the Board had the pleasure of listening to a report on the manner in which the river was being dredged and dyked by the United States corps of engineers, under Gen. John Newton. In 1884 it sent another petition to Con-

gress for the continuation of those improvements, and several appropriations have since been made for that purpose mainly through its instrumentality. The Board's solicitude for the promotion of the city's water commerce is seen in the active part it took in the attempt to build a ship canal between Newark and New York. An effort was made to secure an appropriation from Congress, but it failed, and eventually the project was abandoned. The river to this day receives great attention from this body of business men; any obstructions in its channel are reported by it

to the proper authorities as soon as known of.

The Board in the first year of its life induced the New Jersey

Railroad Company to lengthen the span of its draw-bridges over the river so as to leave a space of 70 feet in width for the passage



P. T. QUINN, SECRETARY.

of boats and ships. It has since fought successfully against the practice of the railroad e o mpanies to close the draws in the winter for repairs at such dates as they pleased and for as long as they pleased. Now each bridge is closed at a stated date and for a stated length of time.

Indeed, without dwelling
longer upon details, it may be
safely said that
the Board of
Trade has been
energetic, enthusiastic and

active in every movement toward improving the city's advantages and resources, its manufactures and its commerce.

The Board has now a membership of over two hundred, and includes among its numbers all of the most prominent and progressive manuf acturers, merchants and professional men in the city. It ought, in the future to be a potent, if not principal factor in the city's advancement



LLIAS S, WARD, THIRD VICE-PRESIDENT.

and prosperity, and its past achievements should be eclipsed. The monument of Seth Boyden, Newark's greatest mechanic, in Washington Park, was erected by the efforts of this Board, at once an ornament and a monument to its own public spirit. This statue was modeled by Karl Gerhardt, of Hartford, Conn., and is a work of art of which any city may be proud. But aside from its æsthetic value, it is the first public monument ever erected to the honor of labor in this or any other country.

The Board of Trade, its meetings as well as its publications, have been the influential medium through which Newark and its commercial advantages have developed into metropolitan greatness and success. Early it saw its opportunity, and it is to be congratulated upon its achievements.

The present officers of the Board for the year 1892 are as follows:

President. Allan Lee Bassett; Vicepresidents. John B. Stobaeus, Samuel Atwater, Elias S. Ward; Sceretary, P. T. Quinn: Treasurer, James E. Fleming; Directors, Samuel S. Sargeant, William A. Ure, George A. Williams, George W. Wiedenmayer, A. B. Twitchell, R. G. Salomon, Riley W. Bond, James Hodge, A. E. Seliger.



JAMES E. FLEMING, TREASURER.

THE LEATHER INDUSTRY.

HE pioneers of Newark were evidently believers in the maxim, "There's nothing like leather," and their faith has been justified. The leather business has been one of the chief factors of the greatness of the city. It has already been shown how the first tannery in the town was established by Azariah Crane, in the year 1698, near "the watering place for cattle," and how the necessary land was given him "so long as he doth follow the Trade of tanning." More

than twenty years prior to this time, in the year 1676, a "Sealer

"tannery" of which there is any record or mention, is that established by Azariah Crane in 1608.

Figures are not forthcoming to show the progress of the leather industry during the first century and a half of the town's existence. But in the year 1810 we find, by the United States census for that year, that the town turned out \$451,070.00 worth of leather and leather products. In the year 1830 there were thirteen tanneries in the town, with an aggregate capital of \$78,000.00. The value of the leather turned out by them in that year was \$503,000.00. This did not include products manufactured from leather. In the year 1835 the value of the leather

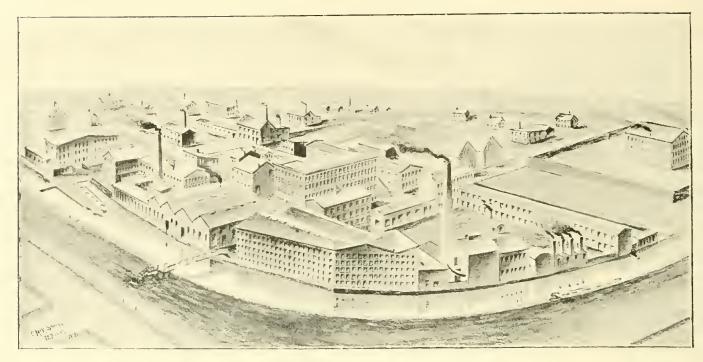


GROUP OF LEATHER MANUFACTURERS.

of Leather" was appointed "for this Town," "according to the order of the General Assembly," and it has been argued thence that leather was made in the town prior to the year 1676, but it is probable that what leather was made was simply home-tanued, and that merely the surplus over what was needed for home consumption was offered for sale. This appears the more likely from the fact that the preamble of the Act of the General Assembly, ordering Sealers of Leather to be appointed, recites that complaints had been frequently made that leather sold in the province had been insufficiently tanned. It was evidently home-made, amateurish work. But at all events the first

product of the town was \$889,200.00, an increase of more than seventy-five per cent. in five years. The following year, 1836, a census was taken by the city authorities, and from it we find that the value of the leather product was \$899,200.00. We also find that the manufacture of boots and shoes gave employment to 734 persons, and turned out a product valued at \$1,523,000.00; and that the manufacture of saddles, harness, whips, &c., gave employment to 590 persons, with an output valued at \$885,500.00.

By the year 1860 the number of tanneries in the town had increased to thirty, with an aggregate capital of \$1,025,300.00, employing 1,064 men, and with an output valued at \$2.880,022.00.



T P. HOWELL & CO., MORRIS CANAL, NEW, WILSEY AND NUTMAN STREETS.

In the year 1870 there were forty-five tanneries, and the total output was valued at \$5,998,361.00. In the year 1880 the number of leather manufacturing houses was only thirty-nine, but the total value of their output was \$10,442,092.00, or almost double that of 1870.

At the present writing the United States census for the year 1890 of the manufacturing interests and products of Newark has not been published, so that it is impossible to give any figures for that year.

The most remarkable branch of the leather industry in Newark is the manufacture of patent and enameled leather. The father



T. P. HOWELL, FOUNDER,

of this industry here was Seth Boyden, whose name is so memorable in the industrial history of the city. His sales of patent leather in the year 1824 amounted to 89,703.06. In the year 1840 two houses were engaged in the manufacture of patent leather, with a total production of \$18,229.17. In 1850 the number of patent leather tanneries had increased to four, and the value of their output had swelled to the sum of \$216,666.67. In 1870 the number of these tanneries was fourteen, and the value of their production \$2,999.180.00. The next decade does not show as great a relative increase in the trade, for which, no doubt, the long financial depression from 1873 to 1878 was responsible. In 1880 the total output of the patent leather tanneries was \$3,480,-981.67, an increase, however, during the decade of over thirteen per cent. During the year ending June 30, 1889, the total value of the production of patent leather had grown to the vast proportions of \$5,567,575.00; number of tanneries twenty-three.

T. P. HOWELL & CO.

IN 1840 the late Theodore P. Howell laid the foundations of the great leather industrial establishment which occupies several acres of ground on the Morris Canal, New, Wilsey and Nutman streets, which is in all probability the greatest tanning and currying establishment in many respects in the world. Mr. Howell not only found time to superintend his great tanneries in Newark, but also had an immense slaughtering establishment in New York City, where he had a quarter of a million beeves dressed under his immediate care in order to avoid the cuts, bruises and scarifications which nearly ruin so many hides from carelessly dressed beeves.

The establishment has been carried on since the death of Mr. Howell in 1 — by his sons Henry C., and Samuel C. Howell, both of whom are worthy representatives of their illustrious father. Under their care the business has gone steadily forward till this year, 1892, when it requires such an array of figures as follows to represent its greatness, viz: 40,000 hides of beeves, 150,000 skins of sheep, 10,000 skins of mountain deer and 10,000 skins of calf, are yearly turned into leather, requiring the labor of quite six hundred skilled workmen. The output of this house has a value of more than a million of dollars annually.

BLANCHARD, BRO. & LANE.

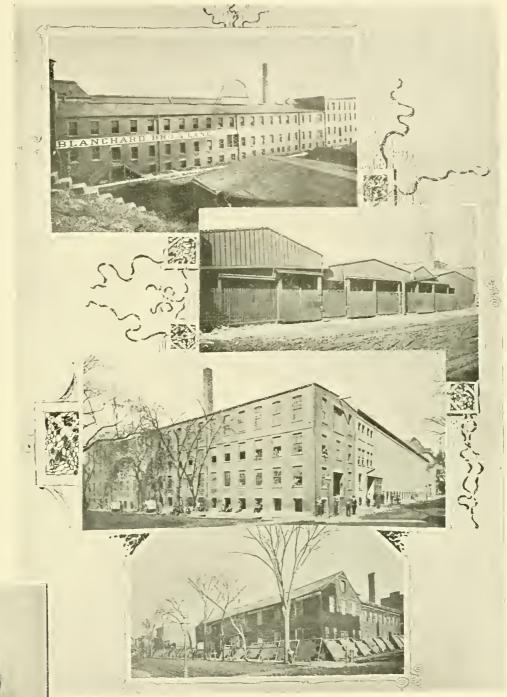
W E present herewith an illustration of the establishment of Blanchard, Bro. & Lane, on the block bounded by Bruen, Hamilton and McWhorter streets, also a portrait of its founder, Noah F. Blanchard.

The name of Blanchard is closely interwoven with the patent leather industry of Newark, the four brothers, Noah F., David O., Samuel F. and Charles C., having been all brought up as tanners and japanners of leather. Newark being the central point of this industry, they removed here from the East early in the forties, and soon became noted for their skill in and knowledge of this business, to which they have devoted their energies.

In 1860 the oldest brother, Noah F., started the business which has since developed into an immense establishment, the name of which is known wherever the article of patent leather is used. The year following, Mr. P. Van Zandt Lane joined the Blanchard brothers,



NOAH F. BLANCHARD, FOUNDER.



BLANCHARD, ERO, & LANE, BRUEN, HAMILTON AND MC WHORTER STREETS.

uniting his business and financial knowledge with their practical oversight of the manufacturing department, and he now occupies the position of head of the corporation in which the firm was merged after the death of the founder, whose sons now occupy the practical position held by their honored father.

The present officers of the apany are P. Van Zandt Lane, president; Theodore C. E. Blanchard, vice-president; Matthew T. Gay, treasurer; Lenox S. Rose, secretary, and Fred. C. Blanchard, superintendent.

The goods of this company find markets in all parts of the world, their production being used by the carriage, harness, upholstery and shoe trades, their reputation being of the highest grade. Gold medals and diplomas were received by them for their exhibit at the International Leather Exposition in Berlin in 1877, and at the late Paris Universal Exposition, and their efforts have

ever been to maintain the high standard Newark leather has in the markets of the world.

C. H. & J. D. HARRISON.

THE extensive tanneries of C. H. & J. D. Harrison occupy a large plot of ground bounded by New York avenue, McWhorter and Garden streets, but a few yards from the tracks of the Pennsylvania Railroad. These immense tanneries now, in 1892, have an output of several hundred thousand dollars. This firm allows no hides to go into their vats except from the backs of steers fattened for market, and consequently the brands of leather which they turn out are very popular in the marts of trade. The Harrison brands of coach, carriage, saddle and harness leathers are of the very finest quality, as well as the fancy leather in colors, the book-binding, the traveling bag and belt leathers, all of which are popular and find a ready sale. While the Harrisons have never allowed their business to suffer in consequence, they have found time to act the part

of a worthy citizeuship and have served the people in official capacities, John D. having been made Sheriff of Essex county, and Charles H. elected to the Legislature. John D. is now president of the Security Savings Bank and of the Newark Electric Light and Power Co., and the Domestic Sewing Machine Co., and is connected with other financial and business institutions.



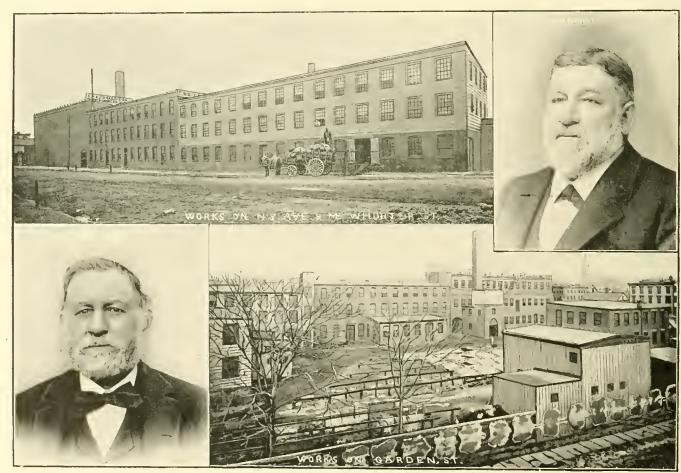
SETH BOYDEN, INVENTOR OF PATENT LEATHER.

THE INVENTOR OF PATENT LEATHER

As the wayfarer passes along Broad street and his eye casually turns to the westward, he sees the monument erected in lasting bronze to the memory of the aproned monarch, Seth Boyden, one of the greatest geniuses in mechanism that the world has ever produced.

Seth Boyden! What a simple name, but what a fame! The world is full of monuments erected in honor of warriors, statesmen and eminent divines. Cities almost everywhere have delighted to honor their noted dead, but it was left to the city of Newark, in the State of New Jersey, to honor the mechanic and inventor. It was left to Newark to pay the just tribute to the man who built the first locomotive, the inventor of patent leather and malleable iron. In honor of Seth Boyden, whose genius in mechanics and invention contributed beyond measure to the upbuilding of the

great industrial city of Newark, and laid the foundation for the great leather industries carried on here, there stands and will stand as the ages flit by, the monument of honor, which, if the passerby will stop to contemplate, will teach such lessons of love and generosity as will continue so long as life lasts.



C. H. & J. D. HARRISON, NEW YORK AVENUE, MCWHORTER AND GARDEN STREETS.



REUBEN TRIER, MCWHORTER AND KINNEY STREETS.

REUBEN TRIER.

There are eighty-seven firms engaged in manufacturing leather within the boundaries of the city of Newark, which turn out such an enormous quantity of leather as would startle any who had not made themselves acquainted with the facts in all their various forms as they exist at the present time. The united productions of these great industrial concerns are dis-



REUBEN TRIER.

tributed throughout the cities of the United States, and quite a large percentage exported to other countries. The illustrations on this page represent the works of Mr. Reuben Trier, manufacturer of patent and enameled leather. The plant was founded in 1882, situated on McWhorter and Kinney streets, and though young in years, comparatively, makes a showing worthy of high commendation. The house is a leading one in its line of trade, and its founder and conductor, Mr. Reuben Trier, ranks among the prominent and able representatives of the patent and enameled leather industry of Newark.

Mr. Trier is himself a practical tanner, and a gentleman of wide experience and acknowledged skill in the leather trade, in the successful prosecution of which he has displayed in a marked degree the sterling qualities and progressive enterprise that characterizes the prosperous manufacturer. The tanneries of Mr. Trier cover nearly the entire block on McWhorter street, between Oliver and Kinney streets. They are equipped with all the latest and very best improvements known to the trade. In the conduct of his tanneries the proprietor gives steady employment to nearly one hundred skilled workmen in the various departments, and judging from the progress made in the past decade the necessity will soon exist for an enlargement of the plant and for an increase in the number of hands.

The products include all brands of patent and enameled leather, and the finer grades of furniture leather, this latter being a specialty of the firm, all of which find a ready sale in the cities of this country. The house is well and favorably known, and its founder is one of the most successful representative leather manufacturers of the city.

Mr. Trier is not only a successful business man, but is one of those men who has a strong hold on the confidence and affections of the people, and has often been called upon to fill places of public trust and honor. He has represented his Assembly district in the State Legislature for three successive terms to the satisfaction of his constituents. Mr. Trier is now a member of the Board of Works.



HUGH SMITH, CENTRAL AVENUE, BLEECKER, HOYT AND LOCK STREETS.

HUGH SMITH.

A MONG the numerous tanneries which have contributed to make the city of Newark, N. J., the centre of the patent

псы выти.

and enameled leather industry of the United States, and perhaps of the world, are the works of Mr. Hugh Smith, located on Central avenue, Bleecker, Hoyt and Lock streets. These tanneries stand deservedly high. Starting in 1862, with a capital of less than two hundred dollars this public spirited and enterprising citizen has built up a business of large

proportions for the manufacture of the celebrated "Durhar Brand" of patent enameled and fancy colored leather of ever

description, which are sold from his own office without the aid of a single salesman, thus making their own market and commanding the highest prices. Mr. Smith is ably assisted by his two sons Messrs J. T. and H.E.Smith. For several years much of the responsible detail work of the establishment has fallen to the hands of these representative young business men.



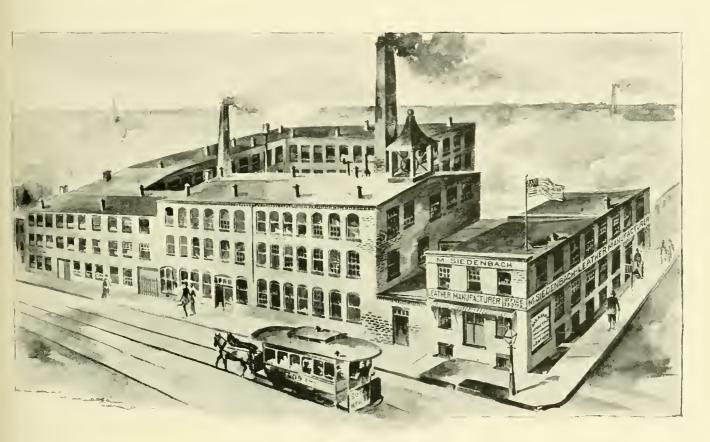
JAMES T. SMITH.

M. SIEDENBACH.

THE city of Newark, N. J., favored as it undoubtedly is by location and natural advantages, combined with the push and enterprise of its citizens, has steadily advanced in wealth, influence and prosperity, until at the present time it stands unrivaled as a manufacturing centre amongst the great cities of the American Union. In the pursuit of manufacturing industries, "there is no city in the United States that surpasses it in the numerous variety of its industries." Hence, that particular interest which has contributed so much toward accomplishing this grand result, must necessarily be a vastly important one. Such

of this city and its busy artisans. The superior advantages afforded by the location of the city for the cheap and rapid acquirement of raw material, together with the abundance and cheapness of power, both water and steam, gave the industry an impetus in the outset, which has never lagged up to the present time. Among the large establishments now devoted to the conduct of this branch of industry is that of Mr. M. Siedenbach.

The extensive tanneries of Mr. M. Siedenbach, corner of Summer and Seventh avenues are noted for their production of the various grades of bag, trunk, case, pocket-book, bookbinders



M. SIEDENBACH, SUMMER AND SEVENTH AVENUES.

to-day is the leather industry with millions of dollars invested, employing as it does thousands of skilled citizen mechanics, and with inumerable kindred interests dependent upon it. Nearly two centuries ago the first leather factory or tannery was erected in April, 1698, in what was then called the Swamp, now Market street, by Azariah Cranè. Since then the leather business has been an almost indispensable adjunct to the manufacturing interests of the city. What the cutlery industry is to Sheffield, England; the iron interest to Pittsburg; or the grain interest to Chicago, so the leather interest may be said to stand in its relation to the welfare and importance of Newark, being by far the most largely represented of any of its industries. In 1818 the manufacture of patent and enameled leather was introduced by Seth Boyden, who is the author of numerous useful and valuable inventions which have contributed in no small degree to the fame

and furniture leather, in all colors. The plant is one of the most complete in the city, being well equipped with all the latest and most improved machinery throughout. Mr. Siedenbach uses only cow-hides which are handled from the raw or salted state, the tanning and finishing being all done on the premises and under his own personal supervision. The "Seal Brand" of this house is well and extensively known in all the markets of the United States, and are exported to Canada, South America and the States of Europe.

The success of Mr. Siedenbach is due largely to the careful attention which he devotes to the business and his complete understanding of the wants of the trade. He is very particular as to the minutest details of filling and shipping orders, and thus he has gained the good will of the trade, with a bright promise of its retention.



CASHION & FLYNN, CHAPEL STREET.

CASHION & FLYNN.

THE business of this flourishing young firm had its foundation laid in 1882. In a small way Richard Cashion and John B. Flynn, two enterprising young men who had served apprenticeships, opened business, but their knowledge of tanning in all its branches was such a helpmeet that they soon established themselves (although the older tannery men dubbed them "the

boys, ') it was not long before they reached such an advanced state as to need enlarged quarters, and they increased thei advantages accordingly.

Their establishment is on Chapel street, and has a capacity of several hundred thousand dollars. The beautiful engravings of their buildings, as illustrated herewith, show very truthfully where their specially popular brand of patent enameled furniture and hat leather is made. They employ about seventy-five metand turn out two hundred and fifty hides a week.



RICHARD CASHION.



THOMAS FLYNN.

R. G. SALOMON,

N the infinite variety of its leather productions The Hamburgh Cordovan Tanneries of R. G. Salomon have few equals and no superiors. These great tanneries over which Mr. Salomon presides with masterly genius and marvelons suceess, had their foundations laid in 1877 in an unpretentious little place, where he labored himself and gave employment to two others. From these modest beginnings has grown the great industrial establishment, which in many respects, take rank with the best in the world. The unbounded spirit of enterprise, the genrus and wisdom, the never say fail character of R. G. Salomon when studied by the light of the splendid results seen in the successful upbuilding of his great business, are worthy of the highest commendation and the fullest emulation.

In the great tanneries covering the immense territory extending from No. 99 to 115 Sussex avenue, and from No. 14 to 38

Nesbitt street, more than six hundred and fifty men are given steady employment at remunerative wages. Not these great bee hives of industry alone are sufficient for the conduct of his great business, but he must need occupy the immense building on Avenue C, formerly occupied by the late deceased and well-known morocco manufacturer, Christy Nugent, as well as two immense warehouses in Newark, with branches in New York, Boston, San Francisco and Chicago, as helpmeets indeed. To satisfy the insatiate maws of his tanneries representative agents are kept busy gleaning the markets of the world for hides and skins, Africa, Anstralia and far-away India; England, France, Austria and Germany, also contributing rich material for satisfying the growing appetite of these great tanneries. Into his enormous vats more than three million skins are placed every year. In their passage through the various stages of their conversion into leather resulting in the enormous total output of more than \$2,000, ooo, with a capacity for 3,000,000 of dollars a year. In this connection, it may be interesting to know that thousands of the skins of the high leaping kangaroo or marsupial of Australia, find their way over more than fourteen thousand miles of



R. G. SALOMON, SUSSEX AVENUE.

boisterous sea, to be converted into leather in the tanneries of Salomon only to make the same journey back to Van Dieman's Land for conversion into shoes for the people to wear. Just here, it is not unworthy of mention, that R. G. Salomon is the father of the horse hide tanning industry of Newark and in this country, as well as being one of the chief promoters of the business of tanning and converting into leather the hides of the steady-going, busy, old porpoise of the seas, for the capture of which he maintains his own private fisheries at Hatteras and in the Gulf of St. Lawrence. His tireless agents also gather in yearly, thousands upon thousands of skins from the deer and the antelope roaming the hills; and goats from the far away rocky crannies, in order that the skilled artists and rare manipulators of hides and skins of animals in his employ may be supplied with a sufficiency of raw material to keep them busy. He does not stop here, such a demand has his industry made for the utile and beautiful alligator leather, which he turns out from his establishments, it takes nearly or quite all of the precions time of that strange pachyderm growth from his babyhood alligatorship to his erocodile manhood to "mind his eye," while taking his sun-

baths on mossy banks of the sluggish lagoons in the everglades of the Sonth or lolling his hours away on the warm sands, lest the wily hunter who has learned the value of his scaly skin shall catch its sparkle and glimmer and send a "brain searcher," from his Minie rifle and start his scaly rough hide on its way North for conversion into leather in the vats of Salomon on Central avenue and Nesbitt street, from whence, "Heigh Presto," it comes forth

With its markings quaint, strange and rare, To circle the waist of my lady fair.

and we are divulging no secret when we state a fact that should be generally known that the alligator skins, in more than a hundred beautiful shades of color, are converted into dainty slippers worn in the Harems of Turkey, and that quite lately a demand has sprung up in China and Japan for this specialty. In all the great leather centres of the nations few brands are sought more generally and command a more ready sale, at better prices than the "Cordovan," of Newark, N. J.



R G. SALOMON, NESBITT STREET.

JOHN REILLY.

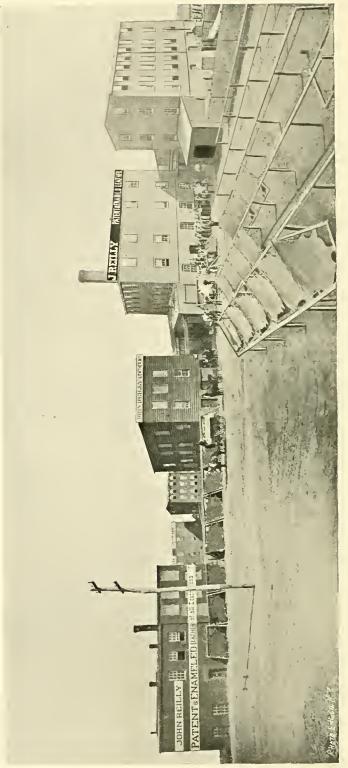
THE future of Newark as a manufacturing point is not a matter of guess work. It would have been made a certainty by its leather interests alone. The magnitude of this industry can scarcely be related without exciting a doubt as to the credibility of the narrator and the credulity of the reader, but in commercial circles the immensity of the business is well known

In the front rank of the patent and enameled leather mannfacturers stands Mr. Rielly, who in 1871 established the factory on Avenue C, Murray and Astor streets, near Emmet street station of the Pennsylvania railroad, now one of the most prominent plants of its kind in the country. Every process through which the leather passes from its crude state to its finished state is under his personal supervision, and its market is the world. A thoroughness of manufacture and an enterprising policy of doing business, coupled with the known integrity of the man in commercial circles, compass the reasons of his exceptional success. Time was when Newark's leather industry was confined to a few tanners of hides and those who put them in shape for carriage use-or for that matter any use to which enameled leather may be put—were few and far between. Their product was the poorest, and would have driven the trade away from Newark, but for the work of such men as Mr. John Reilly. He is one of those who brought to bear upon the industry a wealth of energy and brain, which would have ensured success to any enterprise. It was attention to detail, a keen I nowledge of the requirements of business and a determination to win, characteristic of the man, which won the way. The half tone engravings from photographs represented on this page, convey to the reader an idea of the works which Mr. John Reilly founded, and has presided over for nearly a quarter of a century.

The golden value of a practical and thorough business education for men who embark in the manufacturing



JOHN REILLY



pursuits, has seldom found a more forcible illustration, than in the case of Mr. John Reilly. Here is a man whose steady success has frequently led citizens to inquire the cause, which was principally his entering the patent and enameled leather industry with a keer understanding of its many intricate demands. After a long and worthy apprenticeship Mr. Reilly started to build for himself a noble future, and his success may be read in his past clean record and his present standing in the manufacturing and commercial marts of the leather trade. He has labored strenuously to produce the very best grade of leather, and in his transactions towards his customers has at all times manifested a marked degree of business veracity.

CONROY & WEYRAUCH.

FOR nearly two centuries the art of tanning and currying leather in all its various forms has been one of the staple industries of Newark, N. J. Ever since the establishment of the first tannery at the "swamp" or "watering place" on Market street in 1698, the business has steadily increased and wonderfully improved.

Men of remarkable talent have been identified with this line of business, and the official records of the United States patent office at Washington unfold the stories of their achievements in the way of devising new methods, new processes, and new produets. Where the onward movement will ultimately reach, no man is wise enough to foresee. On this page is represented the works of Messrs. Conroy and Weyrauch, manufacturers of every description of fancy colored leather. The business was established in 1881, and located at Nos. 45 and 47 Morris avenue. The plant is admirably fitted up with every improvement and enjoys a patronage of large proportions, due principally to the excellent products, consisting of bookbinders', pocketbook makers', and all kinds of fancy colored buffings, the latter brand being a special

feature of the house. Messrs. Conroy and Weyrauch are practical leather men with a thorough knowledge of the trade in all its details, and retain the confidence of all with whom they have had business transactions.

All the special brands of Newark made leather find a ready sale in the leather markets of the world, and always at fairly remunerative prices. Thus, it is, that so large a percentage of those engaged in the tanning and currying business within the bounds of the city of Newark, early become comfortably well-to-do, and not a few become millionaires. While Messrs. Conroy and Weyrauch do not yet class with the latter, they have gained such honorable competence as is a fitting reward for a career of well-doing. As an incentive to others to follow in the lines which



CONROY & WEYRAUCH, 45 AND 47 MORRIS AVENUE

this company have laid down, they have but to note their rapid progress made under the conditions surrounding this firm, who first became mechanics and studied the theory before they became practical business men, so that their progress may not be evanescent and fleeting, but firm and enduring. With Conroy & Weyrauch, as with many other among the successful leather manufacturing firms of Newark, it has been the practical and theoretical knowledge of the business which has been their guiding star, while an honorable determination to succeed has lured them on to success and given them such a competence as might satisfy the most ambitiously inclined. "There's nothing like leather," except it be "good leather."



JOHN F, CONROY



GEORGE WEYRAUCH.



L. M. SMITH & SONS, MORRIS CANAL AND LOCK STREET.

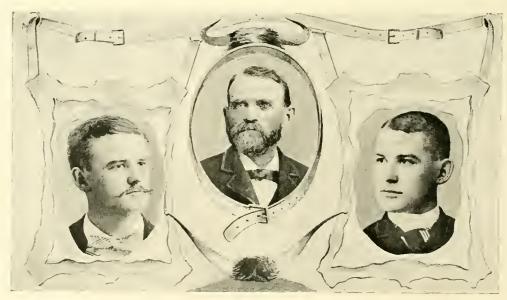
L. M. SMITH & SONS.

THAT the city of Newark stands peerless and unrivaled among the manufacturing centres of America, is a fact on the record which stands without gainsaying. With a population of two hundred thousand souls—a° little more perhaps—it starts the wonder growing, when the realization of the fact steps to the front and settles the declaration that within the territorial boundaries there are fully fifteen thousand places where manufacturing in some one or more of its multitudinous phases is carried on. High up on her pleasant hills, and among the wide-spreading branches of her forest of shade trees; low down among the sands of "the Neck," along her busy thoroughfares and deep, dark alleys, from here, there, and almost everywhere, the curl of the dark smoke is

seen ascending from the slim pipe or tall chimney of some place where manufacturing is in progress.

Among the nearly one hundred tanneries nestling in every part of her domain, where much of the very best leather in the world is made, the industry carried on by L. M. Smith & Sons, at 61 and 63 Lock street, adjoining the canal, although young in years when compared with many which are hoary with age and filled with honors now in the leather manufacturing line, they have a rank and standing over which they may well feel elated. From 1869 until 1887 the head of the firm was associated with others, but the bent of his genius, his skill and perseverence had to have a wider field in which to work out his long cherished ideal, and taking his two sons with him, they started the

manufacture of leather on their own account, founding the firm above named. Herein, the success which has followed their close application to business, which first had the necessary practical acquaintance, is an example for young men growing up in our midst, which would insure great profit to them by emulation. L. M. Smith & Sons now employ between twenty-five and thirty skilled workmen, and handle 250 hides a week, which they convert into patent, enameled and bag leather; also leathers for pocket-books, and fancy colored leathers in great variety, all of which find a ready sale in the several cities of the United States. If more of our young men had, and would exercise the moral courage which is having such a beautiful demonstration in the course that the younger members of this firm are pursuing, there would be more real success than now marks their progress.



L. M. SMITH & SONS.

MOSES STRAUSS.

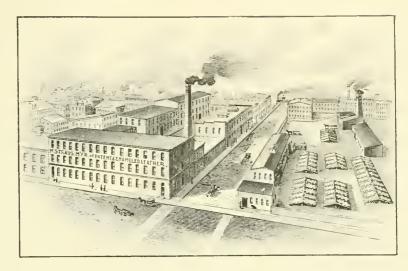
L ONG years before Moses Strauss had become afflicted with the desire to travel in foreign lands, Newark had been made the city of promise, as the home of men; where manufacturing should be carried on. He had not looked up to the mighty Alp on Alp, nor seen them glinted over with the sun's evening adieu in finely spun lines of purple and gold, for the last time without lamenting his long delayed thought of tearing himself away from the land of his birth and the home of his fathers.

The sound of the hammer, the purr of the wheel, the puff of the steam engine, as they came up from the citics and villages of his own native land, had little other purpose than to hurry him on in bidding adieu to home and Fatherland to seek his fortune in the new world, far away toward the setting sun, where his mind's eye beheld the modest Dame Fortune beckoning him on. In the fullness of faith to do and dare, with grip-sack in hand, the

step is taken, and now the realizations of all, is to leave friends and kindred to establish a far-away home among strangers is upon him, but with a strong right hand the tear of regret that had sprang from sympathy's fount is dashed away forever, and his motto "Onward right, Onward," became the star of his hope, and but a few years roll by when among the many thousand manufacturing proprietors who have established places for carrying on their industries in the city of Newark, deserving particular mention is found that of Moses Strauss, who began the making of leather in 1867. His heginnings were modest indeed, since he gave employment to only five workingmen, but there was a genius and push behind it, which no obstacle appeared powerful enough to hinder in its onward progress.



MOSES STAUSS



BIRD'S EYE VIEW OF THE PLANT OF MOSES STRAUSS, HERMAN AND AFSEY STREETS.

Like many another from the Fatherland, Moses Strauss had a fondness for travel in his early years, and following this bent he visited various interesting points of the United States, but finally selected Newark as the place wherein to build a business, a name and a fortune. Having learned the trade of tanning and currying, it was natural that he should early settle down to the idea, that there is "nothing like leather." So it is in no way surprising that we find Mr. Strauss engaged in the work of making leather, a business with which he is thoroughly acquainted, and giving another example of the tact and good judgment of the sons of the Fatherland. In the early days of his wonderfully successful career Mr. Strauss confined his efforts to the making of bag and belt leathers, but with that quick and certain discernment, for which Moses Strauss has ever been noted, he saw the opening of the large undeveloped field in the carriage and saddlery lines of leather and arranged his plant for its manufacture. At this time he is turning out 350 hides a week from his great tanneries situated on the blocks of ground between Johnson, Vesey and Hermon streets. The brands of leather turned out of his industrial establishment rank deservedly high and sell readily in all the leather marts at home and abroad. Wherever Newark made leather is sold (and where is it not?) the finer grades manufactured by Moses Strauss are eagerly sought.

As the thoughts revert to the young man, as he walked the streets of his native place and where everything is naturally dear to him, as the companions of his childhood and youth; the image of the ost opportunities and of so many failures come up before him and grudgingly give place to such a marked example of a wonderful success, following close on the decision to leave them all behind, to be cherished only in sweet remembrance, as the years, heavy laden with unreluctant toil for a living and competence roll by; as he hies him away to America to enter the struggle in the race of life away over there. Here then, in the head of this one of Newark's great industrial establishments, now stands this young man in the person of Moses Strauss, another of the glorious examples for emulation by others, and in full demonstration of the fact that the lack of capital in cash to start with, is not a harrier against success, but as in the example of Moses Strauss and many others, who having the will, soon learn the way to cross the barriers, mount the walls and plant their banners where they can float in triumph and where a full competence peacefully

Mr. Strauss is happily situated in having an able son to assist him in bearing the burthen of his great business in the closing years of his active business life. Mr. Louis Strauss, his son, early felt leanings toward the calling and adopted the profession of his father for his life business.

CUMININGS BROS.

VEWARK stands to-day without a rival in the leather industry in the civilized world. The percentage of her population engaged in the work of converting the hides of animals into leather, is truly startling in amount when compared with that of many of her sister industries. When the amount of capital invested in the tanning plants which have grown up within her borders in the past decade is considered, there is little wonder that the growth of the city has been so phenomenal, and that when it is added to the entirety of money invested in leather-making enterprises, it mounts up to more than sixty millions of dollars.

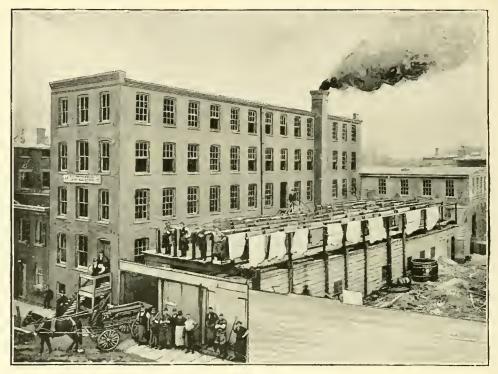
When the first tanner laid the foundations for the lime pit and tannery in the early history of the town, he in all probability built better than he knew. He little thought that in his modest beginnings he was lighting the spark of an industry that would know no quenching. He had much less thought that his modest begin-

nings would have the marvelous growth and development, which marks the greatness of this important branch of the manufacturing industries of New Jersey's metropolitan city at this time.

The history of the leather industry is so interwoven with the rise and progress of the city of Newark itself, that in writing the history of one, the statement of the facts relates to the other, so close do the lines of their march run together.

Among the enterprising firms engaged in this great branch of Newark's industrial interests, is found that of B. Cummings & Bros., leather manufacturers, whose extensive tanneries are situated on Marshall street, near Washington. The beautiful and striking photographs of the Cummings tanneries, on this page, are indeed truthful representations of the buildings which are the homes of the several departments of the tanning industry which they conduct with such marvelous success.

Like thousands of the other industries conducted in the city of Newark, which have grown to their present great proportions, the Cummings tannery industry began life in a modest way in 1879, Mr. James Cummings being the founder. He remained



B. CUMMINGS & BROS., CRAWFORD STREET.

alone in the business until 1881, when his brothers John and Bernard took an interest, when the firm of B. Cummings & Bros. was organized. They are each practical tanners, having learned the art in detail, thus becoming experts in the business, and it can now be said, if long and faithful apprenticeship, supplemented by years of practical experience in the leather industry, directed by more than ordinary intelligence and tact, is worth anything as an introduction to public favor, then the hou e of B. Cummings & Bros. is surely entitled to such favor.

The fact that this house turns out a thoroughly good article has been long established, the personal oversight which the members of the firm give to the business, and the watchful care and oversight which they give the manufacturing processes in all their stages making it quite impossible for an inferior or damaged article to come out of their vats or from off their finishing tables.

Their factories being fitted up with all the latest improvements in the art of tanning, and being fully equipped with all the latest improved necessary appliances, and having in their employ a large corps of skilled workmen, leather bearing the imprint of

flne workmanship and the stamp of hands that are skilled, is the result. This house manufactures the finest grades of furniture, grain, bag, pocket-book, and an almost endless variety of fancy colored leather, all of which is noted for its superior quality and finish. In few markets do the leathers of B. Commings & Bros. need an introduction. They have become so well-known that goods bearing their stamp have only to be seen to be appreciated, and find a ready sale in all the markets of the United States and Canada. The success which has marked the career of this firm is another of the demonstrations of the fact that it pays always to be well up in the theory of your adopted profession before attempting to practice it.



BERNARD, JAMES AND JOHN CUMMINGS.



H. P. WITZEL COMPANY, WRIGHT STREET AND AVENUE A.

H. P. WITZEL COMPANY.

THE foundation of Newark's greatness as a manufacturing city was laid in the tanning of hides and the making of leather. From the beginning, this industry has seemed to draw the most active and business-like men, as well as the thoroughly skilled mechanics and artisans around its, in many respects, uninviting exterior. The reason for this lies in the fact that the great incentive which draw men on: the rich results, were ever present. Whether the purity of the water and high quality of the materials used has done its part, results alone can tell. The facts are before us that no set of men can make a better showing on the tax books of the assessor than can those engaged in the manufacture of the great staple—leather.

Among the nearly one hundred firms engaged in this branch among the thousands of Newark's teeming industries, is that of The H. P. Witzel Company, who carry it on extensively in the capacious factory buildings photographs of which grace this page.

This factory was established in 1879, and has now been running most successfully for nearly a decade and a half of years. Mr. H. P. Witzel, who honors the concern with his name, and is president of the company, is a thorough tanner, and takes pride in his art, never ceasing to labor for its exaltation by turning out the very finest leather that human ingenuity can produce. Close application to business, deep study and painstaking care has produced such results, which, when studied with care by others, redound to his credit and make him an authority.

In 1889 Messrs. August Lochnberg and Daniel Kaufherr were admitted as partners in the concern, and thus bringing to the conduct the industry, genins, talent and business acumen which soon confirmed the promises which Mr. Witzel saw in the proposed combination and enlargement. But many a brilliant promise has been nipped in the bud, and so it proved to this firm when the apparent certainty of an early future of success in business was checked by fire, when on Dec. 25, 1890, the entire plant was destroyed. Nothing daunted by this catastrophy, however, the go-ahead firm which knew no such word as fail, set to work immediately to clear away the charred remains of the debris out of the energy of years of labor, and began the construction of larger, better, more modern and convenient buildings in which to rebuild the stricken industry, and in a marvelously short period of time the wonderfully capacious and convenient buildings now occupied by the firm, and which the photographer's artist has transferred so truthfully to these pages, were ready to receive all the very latest and best improved labor and time-saving furniture and machinery necessary for carrying on the manufacture of leather. The fire

took place on the 25th of December, 1890, and the new factories, to take the place of the old, were ready August 1, 1891. On the 21st of May, 1892, the company was incorporated with Herman P. Witzel as president, Daniel Kaufherr as vice-president, and August Loehnberg as treasurer. Located on Wright street and Avenue A, convenient to railroad facilities, where an easy and cheap transportation of the raw material and finished productions are enjoyed, this prosperous firm carry on their growing business, making all kinds of patent and enameled leathers for domestic and export trades. The tanneries of this firm also make a fine grade of fancy morocco finish leather for upholsterers' use, which finds a ready sale wherever there is a demand for this line of leather productions. Into the vats of this industrial establishment 250 hides find their way each week, which are put through the various manipulations found necessary by the nearly fifty busy workmen engaged in converting them into the various grades of patent enameled, fancy morocco finish, and other grades and brands of leather made in the tanneries of this firm of H. P. Witzel Company.



H. P. WITZEL.

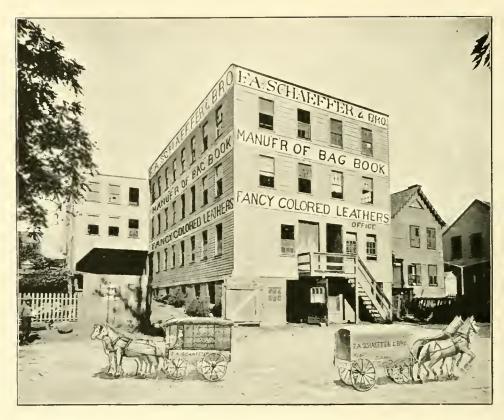
F. A. SCHAEFFER.

HE best indication of the increasing business of the leather trade of Newark is to be found in the way in which the leading houses are increasing their facilities, in order to keep pace with the growing demand made upon them. Among the many enterprising firms engaged in the leather interests of the city that of F. A. Schaeffer is worthy of special mention. The business, the works of which illustrate this page, was established in 1887, located at Nos. 57 and 59 Bergen street. The firm manufactures every description of bag, book, furniture, gimp, cord, fringes and fancy colored leather, which is unexcelled by any other house engaged in the same industry. The output consists chiefly of faney trunk, book and binding leather, which finds a ready sale in the leather markets of the United States and Canada. The firm's customers are permanent ones, which is a sure proof of the superior quality of

their productions and the liberal and honorable character of the firm's transactions.

F. A. Schaeffer is at present engaged in manufacturing a special brand of embossed furniture leather, which enjoys the exclusive distinction of being so made that the colors will not rub off like those heretofore placed in the market, making the firm's brand the most desirable that the trade can purchase. And thus it is that in all the markets in this country where leather is bought and sold, and in many of those across the ocean, the special brands made by F. A. Schaeffer find a ready sale.

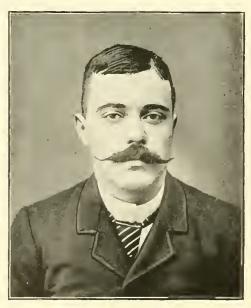
The factory is four stories, 50x100, with an L extension 25x50. A force of seventy-five men is steadily employed, from which



F. A. SCHAEFFER, 57 & 59 BERGEN STREET.

fact some idea may be had of the extent of the output.

It is a novel sight, truly, that one will witness within the walls of the several large buildings which Mr. Schaeffer uses in the conduct of his growing business. Men (mostly stalwarts) stripped to the buff, look spectre-like as they move amid the steam rising from the hot liquor charged with tannin filling the great vats carrying the hides from one to the other, where they are treated to baths in the process of converting them into leather; or as they stand at them and ply the currier's knife to clear the hide from all the flesh and extraneous matter, thence to the drying frame, thence to the branding and general artistic departments where the finishing touches are put on in converting hides into leather.



F. A. SCHAEFFER.



H. P. SCHAEFFER.

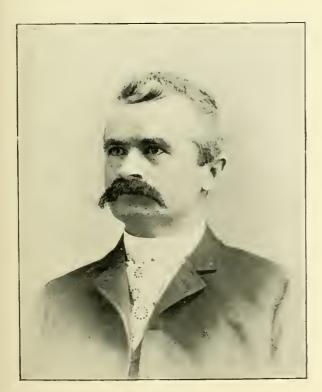
JOSEPH MEIER.

THE immensity of the manufacturing interests in Newark and the diversity of the productions of the constantly increasing number of establishments, which are continually demanding an increasing amount of supplies, will of course, stimulate production.

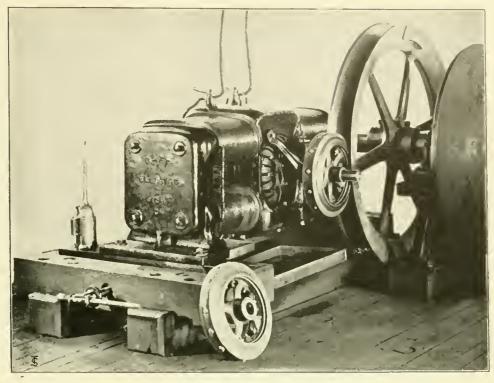
In the single article of leather belting alone, the manufacture and consumption is simply wonderful in amount and startling in character, it requiring the output of more than one great tannery to meet the demand for leather suitable for converting into machinery belts. Thus it is that another great industry has resulted from the demand for a larger and better supply of leather belting One of the concerns devoted to the manufacture of leather belting is that of Joseph Meier at 291 Market street, where many skilled workmen are employed.

Very great and radical changes have been made of late years in the art of belt making, and this

has been brought about by the introduction of electricity, which requires a much better belt than was in use heretofore and which could not be made with the hides tanned at present. Steers which furnished the hides in former years were left till they reached the ages of from seven to ten years before they were slaughtered. This addition to their years made the shoulder parts heavier and the hides larger, and more parts could be utilized than at the present day. Since the large packing houses



JOSEPH MEIER.



MEIER'S PATENT FRICTION WHEEL.

of this country have found that it does not pay to allow a steer to get beyond three years to get profitable beef, therefore it is that excellent belting leather is obtained from the light hides of the young steers, and much less of the hides can be used.

The improved methods used by Mr. Meier in the industry of belt making does away with the use of the shoulder parts, cut from the skins of older steers and formerly used for making what is known as the "long lap" belting, and only the best parts from the hides of young animals are used in the manufacture of the "short lap," which is universally recognized as the best ever made.

In proof of the well recognized merits of the belting turned out of the establishment of Mr. Joseph Meier, it is only necessary to take a look into the great electrical plants and factorys where it is in use. Thus in Newark his belts are running in the New Jersey Zinc and Iron Company's works, the Newark Electric Light and Power Company, the Celluloid Manufacturing Company, the Clark Mile End Spool Thread Company, and by Ballantine & Co., and many others, while in New York four belts of his peerless production, making 350 feet in length, and of the startling width of four feet and four inches, is now running in the U. S. Illuminating Co., and in the Equitable Building on Broadway there are in daily use all the belts for their immense electric light plant.

Besides the conduct of the business of manufacturing belting in all its grades, Mr. Meier has found time to give play to the bent of his genius in other lines and has invented and placed upon the market what is called Meier's Patent Friction Pulley, and means of transmitting power, which has proved a contrivance of great beneficence and wonderful utility. Wherever Mr. Meier's Pully has been used the voice of commendation is loudly heard in its praise. In its adoption for the transmission of power it meets three very desirable ends, viz: First, the saving of space, as will be seen at a glance by the observer, from fifty to seventy-five per cent. of room is saved; second, in saving power; third, in saving journals and lubricants. In the saving of power Mr. Meiers' wonderfully unique contrivance transmits the power from the driver to the driven, and reduces the consumption of lubricants to the minimum.

Mr. Joseph Meier has offices also at 32 and 34 Ferry street, New York, as well as at 291 Market street, Newark, N. J.



WHILIAM ZAHN, PRESIDENT.



CHARLES MULLER, SECRETARY.

THE WILLIAM ZAHN LEATHER COMPANY.

IN THE very roomy looking and comfortable quarters represented in the photograph of the buildings on the opposite page, are housed the tanning and currying industry of the William Zahn Leather Company. The plant is located at Nos. 309 to 327 Academy street, and at Nos. 197, 199 and 201 Norfolk street, while their handsomely fitted up offices are at No. 325 Academy street.

What made the building up of this great industry possible, and at the same time giving it such an impulse as to challenge the admiration of the enterprising and thoughtful, everywhere within the reach of its influence, was the genius of William Zahn, who invented several methods of tanning Dongola kid, and had the same patented in the United States of America, and in Canada, Great Britain, France, Germany, England, Belgium, Austria and Italy as well.

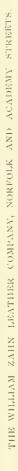
Among experts in leather, and leather manufacturers in general, the product turned out of the Zahn tanneries it is seen that all the finer elements and none of the coarser are contained in the output; and receiving the plaudits of those who know a good thing when they see it, and who spurn the word jealousy, standing ever ready to say to their fellows who win success in any and all lines, "well done!" In the manufacture of the Dongola kid, none but the very best material and cleanest substances are used, and all the skins which it is designed shall be used in the manufacture of this one desirable brand of kid leather undergo the most careful inspection by old experienced men, who make the inspection, and should they find a single small cut on what is otherwise a perfect skin, it is thrown out and passed over to some other tanning establishment for conversion into a cheaper leather.

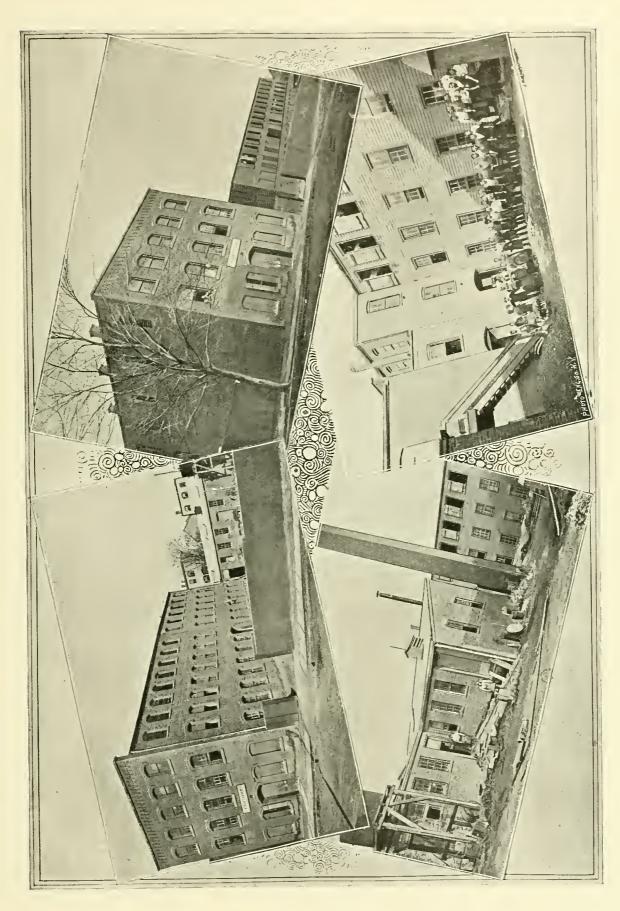
The William Zahn Leather Company does a large business, which had a modest beginning, but the very excellent management of the concern, joined with the marvelous skill of Mr. Zahn, it has grown to its present proportions, and now employs a large capital as well as a large number of thoroughly well skilled curriers, who manipulate the skins, that in the trade throughout the city of Newark they are recognized as master workmen. This leather finds a ready sale in all the markets of the United States and

Canada, and not a little of their product is shipped across the Atlantic, where it gets the first call and commands the largest and best prices which will satisfy the makers here.

Mr. Zahn is a practical as well as a thoroughly scientific man, and fully versed in all matters pertaining to the business. He spends much of his time in the factory and oversees all the various departments. He is assisted by Mr. Charles Muller, the secretary of the company, a thoroughly competent and able co-worker. The firm employ only mechanics who are masters of the various branches of the tanning trade. The scientific and chemical department is under the exclusive management of Messrs Zahn and Muller, thus maintaining and preserving the excellency and far-famed reputation of the products of the William Zahn Leather Company.

The latest addition to the company's immense plant, which is shown on the opposite page, is the chemical laboratory, which is situated on Academy street adjoining the office building of the company, and is under the management of an eminent chemist, a graduate of one of the famous universities of Europe. Mr. William Zahn is an honorary member of the "Academie Parisienne des Inventeurs," and was awarded the grand diploma of the Academie in 1892, and also received the gold medal for the most improved scientific process of acid tanned leather. Owing to the rapid growth of the business, and the increased demand for the superior quality of Dongola kid manufactured by the company, which goes out under the name of "Pioneer Kid," (Mr. Zahn being the pioneer of this method of tanning leather). In 1891 the popularity of this brand of leather had become so great it became necessary, in order to meet the rapidly growing demand throughout the country, to have greatly increased facilities for its manufacture, and the William Zahn Leather Company was organized and incorporated under the laws of the State of New Jersey to meet it. Prior to this time Mr. Zahn had conducted the business exclusively, and had everything done under his own immediate supervision. The company, as at present constituted, consists of Mr. William Zahn, President; Mr. M. F. Zahn, Treasurer; and Mr. Charles Muller, Secretary,





THE LEATHER INDUSTRY SUMMED UP.

F, TO the writer of Illustrated Newark, there is vouchsafed by the proprietors, managers, conductors, operators and workmen engaged in moving onward all the others of the multitudious industries gathered round this great central figure, the pleasant reception, and courtly treatment which is indeed akin to friendship, old and long matured, which has been extended by the leather men and the representatives of this leading industry, we shall be engaged in the pleasant task of picking sweet flowers from the field of duty, and regaling ourself with luxuries which we knew to be extant, but felt were beyond reach, and only to be worshipped from afar. With our first knowledge of tanners and tanning, came testimonies of love, forbearance and ideas of courtley welcome to visitors. Did not the courteous Simon throw wide open the portals of his house which stood by the sea side (and he was a tanner) to the despised fisherman, and set such an example of a pleasant reception and courtesy extended to strangers, that set all heaven aglow and started the

Angelic messengers forward on that errand of love which is girdling the world?

It having been the happy lot of the editor to meet and do business with tanners in several parts of the country, and never having come in contact with one who could not be classed as a gentleman, it then did not create surprise when visiting the great leather manufacturing establishments of Newark to find that the leather men were gentlemen, and many of them so truly oldfashioned as to be the duly accredited disciples of the ancient "Simon, the Tanner," who had dug his lime pits, reared his drying sheds and set up his beam, and in short established his plant for the manufacture of leather, close by the Mediteranian sea-side in the far away Judian land. Like many another, our knowl-

edge of the extent and greatness of the industry of leather makers was extremely limited, but as the facts accummulated and the data were filed and the figures rolled up into the totals, and the magnitude of the industry began unfolding and the work of measuring began, our wonder grew apace, and as the evidence of the greatness was presented in the number of establishments, the amount of capital invested in plant, material, machinery and mechines and the labor employed, in the language of Goldsmith, "Still our wonder grew," that such a mighty concentration of industrial wealth and grandeur should be so near and play such on important part in the manufacturing drama, and so very little of it be seen and less understood.

In considering the figures here presented, in totals, it must be remembered that they were collected during 1890, and for nearly two years have been in the collectors hands and now during the closing hours of 1892, given to the public for the first time, as follows, viz: Number of establishments engaged in the manufacture of leather, 50; capital employed, \$5,052,687; total value of plant, \$2,429,405; value of land, \$500,300; buildings, \$678,307; machinery, tools and implements, \$435,321; live assetts, \$2.643,-202; raw material, \$539,106; stock in process and finished product, \$1,268,680; cash bills and accounts receivable, and all

sundries not elsewhere reported, \$835,506; aggregate of wages paid, \$1,534,779; average number of hands employed during the year, 2,303; of these there were males above 16, 1,754; females above 15 years, 2; children, 4; piece workers, 543. The aggregate of cost of materials used, \$4,712,662; divided as follows, viz principal materials, \$4,503,157; fuel, \$57,137; mill supplies, -; all other material, \$152,368; miscellaneous aggregate, \$230,104 There were reported as expended for rent, \$29,240: power and heat, 8000; taxes, \$27,948; insurance, \$25,173; repairs, ordinary, of buildings and machinery, \$35,599; interest on cash used in business, \$35,621; all sundries not elsewhere reported, \$75,923; aggregate value of goods manufactured, \$7,619,667. All other products including receipts from custom work and repairing. \$711,419. That these figures have been largely supplemented since they were compiled in 1890, is evidenced in the preceding pages. The facts therein presented, where it is shown that several new factories have been started and old ones enlarged, giving increased capacity and requiring a large number of employees, for their conduct, is conclusive proof that the industry of tanning has been mater-

ially advanced since the census of 1890.

The history of the world is filled with the recorded deeds of heroic men who have won honors on bloody fields, but the pages of Illustrated Newark is the place for recording the names of men whose genius and foresight has made Newark great. The Howells, Smiths, Halseys, Harrisons, Strausses, Rileys, Triers, Crockers, Salomans, Meyers, Witzels, Siedenbachs, Quimby, Lentz, Blanchard & Lane, Conroy & Weyrauch, the Schaffers, Nieder and Pfeil, the Langs. Zahn and Muller, and those grand men of the early age of this giant industry, Azariah Crane and Seth Boyden, with nearly 100 others, who have contributed and who are now aiding in the great work of placing Newark in the fore front of manufacturing



JOHN NIEDER & CO., EMMET STREET AND AVENUE C

cities of the world, and the imperishable renown of her leather industries.

JOHN NIEDER & CO.

N ILLUSTRATING the various interests which have contributed to make the city of Newark the leading centre of the leather industry of the United States, and perhaps of the world, attention is directed to the enterprising firm of John Nieder & Co., manufacturers of book binders and pocket book brands of leather, The works are located on Emmet street and Avenue C, near the Emmet street station of the Pennsylvania railroad. The firm consists of Mr Jonn Nieder and Mr. Martin L. Pfeil, two young and enterprising Newarkers, whose achievements as leather manufacturers are highly creditable to their push, enterprise and business ability. The plant herewith given from a photograph is admirably fitted up with every improvement known to the trade, and its products are well and favorably known throughout the country for their superior quality and finish, consisting of book binders and pocket book makers, leather of every description and color. Mr. Nieder has ably represented the citizens of his ward and district on several occasions in the board of education and in the State legislature.

THE BOOT AND SHOE INDUSTRY.

WAYS ready to learn, and apt to fashion, and having in view comfort and fine lines of beauty, the shoemakers of Newark early gained a reputation as perfect fitters, and their successors held it close and made it lasting, so that wherever Newark made footwear is seen it carries with it a model for perfect fit, elegance and comfort for others to pattern after. Among no class of our manufacturers

does their exist a more kindly feeling, and the tie that

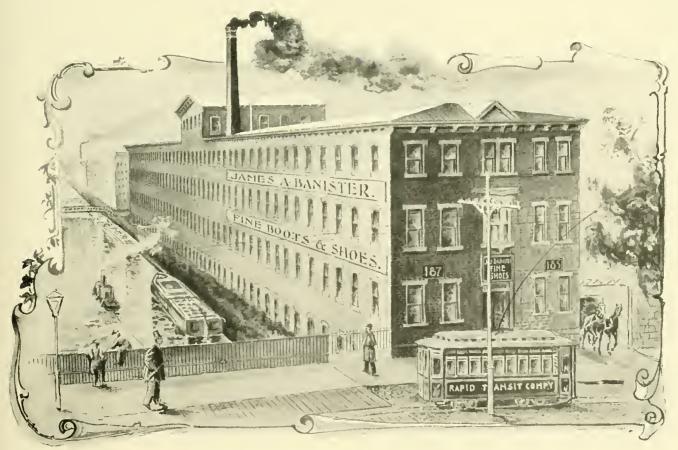
binds is strong and enduring; between employer and employee there has ever been a community of interest, and whatever tended to the welfare of one had the trend toward the best interest of the other. Among the larger number of men who have risen from the "seat," to the station of a "boss," there is a community of feeling which finds its way among the members of teams and becomes an incentive to study and practice, to watch and to learn that they too may be ready to step into the rich places when time or accident shall have made a vacancy. It is an old Franklintonian saying, and one often rehearsed in the presence of the thriftless and the patrons of idleness and those of a roving disposition, "Shoemaker stick to your last," but there is seldom or never a need for its saying to the builders of footwear since they seldom change, but clinging to the old, old calling you will always find the shoemaker at his "last" and "best."

JAMES A. BANISTER CO.

THE manufacture of boots and shoes for men's wear, ranks among Newark's leading industries, both as to quantity and the superior quality of a large percentage of the product. So decidedly is this the case, that in every leading city and town in the United States, Newark shoes are carried by those dealers who cater to the most fastidious custom trade.

No one house has contributed so largely to this result as that of James A. Banister Co. This establishment was founded in the year 1845, by Isaac Banister, father of the president of this company, who was a thoroughly practical shoemaker, being brought up to the trade from his infancy by his father, who was also a shoemaker. The desire of the house always has been to make only the best goods, and taking the best custom made shoes as their models, they have sought to imitate them in style, fit and wearing qualities. How well they have succeeded, is evidenced by the position the house occupies in the trade after an experience of forty-five or forty-six years.

James A. Banister became a partner with his father in 1852, under the firm name of Isaac Banister & Son, the senior retiring in 1857, and the business was continued by James A. Banister until 1865, when Lyman S. Tichenor became associated with him, and the firm became Banister & Tichenor, and continued



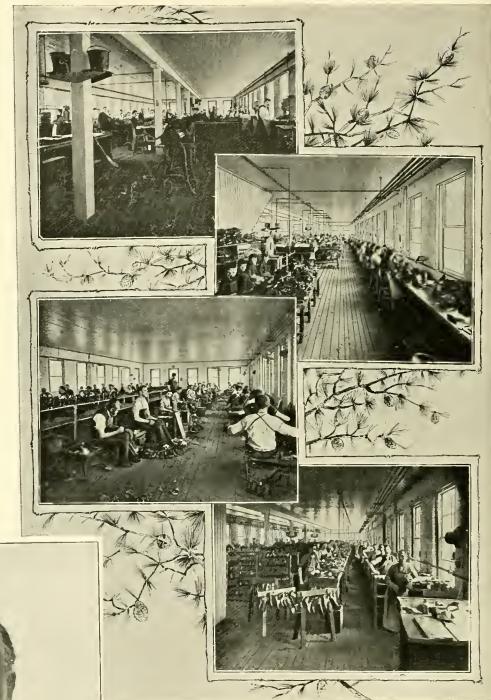
JAMES A. BANISTER CO., WASHINGTON STREET.

so until the death of Mr. Tichenor, which occurred in 1881. From this time till January 1, 1892, James A. Banister was sole proprietor.

On the first of January, 1892, the firm was incorporated under the name of James A. Banister Company, and without any change in the general management—all the stockholders (James A. Banister, John W. Denny, James B. Banister and George A. McLellan) having been connected with the business for several years in the same capacities they now hold.

On account of a strict adherence to the original policy, marke dout by the concern at its start, of making only the best goods, the business has grown to be one of the largest in the United States, and its products are recognized as the standard for the highest excellence in the trade.

The factory now occupied by the James A. Banister Co., is located on Washington street, very near the centre of the city, and was erected in 1888 by Mr. Banister, with a special view to the necessities and conveniences of his largely growing business. It is a four story brick building, 280 feet long with a frontage of 35 feet, thoroughly lighted on all sides. Its ventilating and sanitary conveniences are of the latest and most approved construction. The building is heated by steam in every part. The factory



FOUR DEPARTMENTS IN JAMES A. BANISTER CO., SHOE MANUFACTORY.

is supplied with a large engine and boiler, sufficient for furnishing abundance of power and heat to the premises, and is provided with all the necessary and most improved machinery for the production of first-class work.

The first requirement sought of any machine, which it is proposed to introduce into the factory, is that it shall do its work equal to the old-fashioned hand manner of doing things, and no machine is used that does not come up to that standard.

Mr. Banister has always taken first-class premiums wherever he has exhibited his work in competition with others, and had a medal and diploma given him at the Vienna Exposition in 1873, an award of merit and medal from the Centennial Exposition, Philadelphia, 1876, and a medal from the New Orleans Exposition, 1884-85.



JAMES A. BANISTER.

JOHNSTON & MURPHY.

No one branch of the industrial pursuits which have made the city of Newark celebrated all over the world as a manufacturing centre, has done more in the upbuilding of her greatness than the industry of boot and shoe making. These great establishments, scattered as they are all over her territory, are nearly, or quite, a half hundred in number, giving employment at fairly remunerative wages to thousands of operatives who carry on the work of converting the leather made in her own tanneries into foot wear for the millions, and no industrial centre can boast of workmen better skilled.

Very few, indeed, of the industries carried on in Newark, employ a larger number of men, women, and children than that of boot and shoe making. It is not alone in the large factories that we find this industry progressing. In many a garret and basement cord-waining teams can be seen at their work and often while one

ing leather into boots and shoes for both gentlemen's and ladies wear. Newark made boots and shoes, early in the century, gained a repute for beauty of finish, stylishness of pattern, high order of workmanship, which have been held against all competitors, and all over the world to-day the footwear bearing the trade mark of any one of the great Newark establishments finds a ready sale in all the leading marts of trade and command the very best of prices.

Johnston and Murphy is one of the most successful firms engaged in the manufacture of men's, boys' and youths' shoes for the best retail trade.

The business was established by William J. Dudley, in a small way, in 1850, at No. 312 Market street, from which place it was removed to Nos. 268-272 Market street, where it remained until 1891, when, to accommodate a constantly increasing business, it was again removed to its present commodious quarters, at Nos. 42-54 Lincoln street.

In 1879, Mr. Dudley needing more capital, admitted as a



JOHNSTON & MURPHY, LINCOLN STREET.

of the number reads from a book, phamphlet or paper his companions ply their vocation, listening attentively to what is read and then all will discuss very understandingly points held forth in the matter read, as well as all the leading questions of the times. No class of mechanics are more quietly disposed, or give less trouble to their employers; or are possessed of a larger fund of information: or grasp the leading questions of the times more readily than the shoemakers. It was the great Benjamin Franklin who bestowed upon these sons of toil the distinguished title "Garret Philosophers," in consideration of their achievements in learning, gained during the hours of toil, their work being of that character which does not require any great amount of either mental or physical strain, and thus he may study himself or listen to the reading of others, or whistle or sing all in good time with the rattat-tat of his hammer, as he drives a nail here or drives a nail there

Very few of the industries carried on in Newark use a larger capital, and to a better advantage, or turn out a product of greater value, than do those who follow the business of convert-

partner, Mr. James Johnston, for sometime a resident of Newark; they, continuing the business under the firm name of W. J. Dudley & Co. Mr. Johnston's popularity among the trade had its effect in increasing the business until 1881, when Mr. Dudley died. Mr. Johnston, continued alone until 1884, changing the firm name to James Johnston, and branching out in all directions; opening up new territory for the goods, which were gradually becoming known as one of the most attractive lines shown to the retail trade. He was at this time, and before, largely aided in his efforts by Mr. William J. O'Rourke, now a member of the firm, and who had been with Mr. Dudley, and later with Mr. Johnston, since In him was combined an original and artistic mind, as well as a skillful hand, and having, at this time, charge of the cutting and pattern department, the effect of his handiwork was seen in the increasing repu-

tation of Mr. Johnston's product, especially in patent leather work which has ever been one of the leading features of this line.

In 1884, Mr. William A. Murphy, formerly with his father, Mr. William H. Murphy, in the retail business in this city, desirous to engage in the manufacture of the goods he had formerly sold at retail, and, knowing the growing popularity of this line, sought Mr. Johnston, and was finally admitted as a partner; the firm name being changed to Johnston & Murphy.

The business since continued under the above firm name, although, in 1891, Mr. Murphy disposed of his interest to Mr. Herbert P. Gleason, formerly a salesman for the old firm, and later with Edwin C. Burt & Co., of New York City, as their Pacific Coast representative, At this time Mr. William J. O'Rourke was admitted as a partner.

The firm is at present composed of James Johnston, Herbert P. Gleason and William J. O'Rourke, and has its representatives in all parts of the United States and Canada, as well as a resident salesman in Australia.

The accompanying cuts give the reader some idea of the new quarters of this firm.

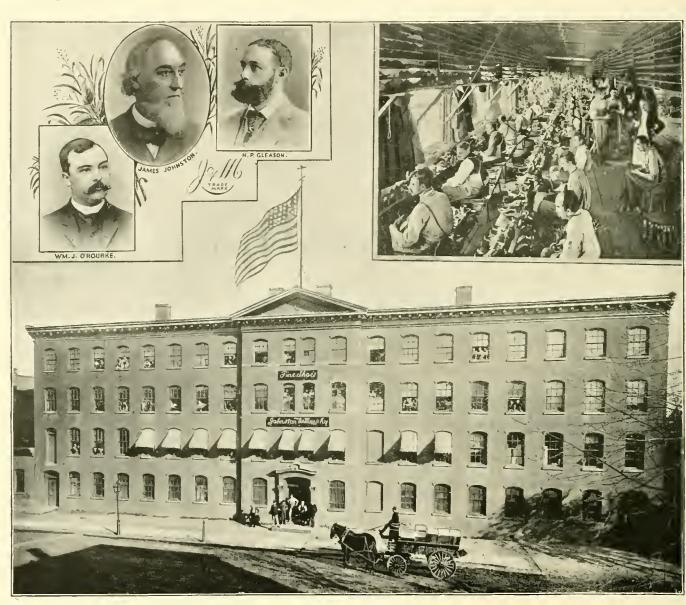
The factory consists of the main building, 150x50 feet, four stories in height, and two wings, 50x100, three stories high. Between these wings, in the large courtyard, is the engine and boiler house, containing a new 100 horse power boiler and Corliss engine, made by the Watts-Campbell Co., which turnish power for the entire plant. In the rear of one wing, is the pleasant home of the engineer.

The large area of floor space in the entire building, gives

some of the finest work produced by any factory in the country.

The reader's attention is called to an excellent photo of this room, which appears in this connection.

Next below, is the main machinery room, with an area of 7,500 square feet, and fitted up with everything that is new and modern, in shoe machinery. The large increase of this firm's output has necessitated nearly doubling the capacity of this room in the past two years. The finishing department occupies another large room, below which is the treeing room, fitted up with a complete outfit of Miller's twin trees running along one side, while on the



ample and well-lighted room for the different departments. The stock room, where the sole leather or bottom stock is prepared, occupies the ground floor, and gives employment to about twenty-five hands. Next above, is the cutting room, where the upper stock is cut from the almost innumerable kinds of leather used in this establishment, and where about thirty skilled workmen are employed. Above this, is the fitting room, where the uppers are prepared, and where about eighty hands, mostly girls, are at work. From here one is taken to the upper story of the main building, occupied by almost endless rows of benches, seated on which are men of nearly every nationality, making their part of the shoe in the old-fashioned manner, such as lasting, sewing the insole and stitching on the outsole. Out of this room comes

other, the shoes are given their final cleaning, and are packed in cartoons ready for shipment. Next is the shipping room, occupying the ground floor of the main building, being easy of access from both the street and various departments of the building.

The principle that the best goods are in greatest demand has always been followed, and that by catering to the best trade, and furnishing the highest grade of work, they are enabled to use only the best material and employ only the most skilled workmenin the manufacture of their product. This principle firmly adhered to, has taken this firm rapidly along the road to success; and the trade mark "J. & M.," which they have adopted and registered, as shown in the above cut, has become a standard of excellence to most retailers and wearers of that part of gentlemen's apparel to-day.

THE A LENZ COMPANY.

HE officers of this company are August Lenz, president, and Isaac L. Silverberg, secretary and treasurer, and there is no doubt but that a few facts in relation to their business, and to them as individuals, would be of interest. Their portraits are herewith given.

Mr. August Lenz, the president of the company, is a native of Baden, Germany, where he was born July 18, 1838. He learned the trade of shoemaking in the fatherland and came direct to Newark, where he started in business in a very small way about twentyseven years ago, consequently he is one of those manufacturers who have risen from the bench. His practical knowledge he exercises in the supervision of the manufacturing branch of the business, and the entire production of the factory practically passes under his eve before being shipped, and the least imperfection is detected and the shoe thrown aside, the intentions of the company being to supply only perfect goods.

Isaac L. Silverberg, the secretary and treasurer of the company, was born in Sacramento, Cal., Dec. 2, 1860. He left California when quite young, and at the age of fifteen started in the wholesale boot and shoe business with his father in Warren street, New York. After his father's retirement from business in 1881, he came to Newark and entered into partnership with Mr. Lenz, forming the firm of August Lenz & Co. Mr. Silverberg attends



AUGUST LENZ





throughout, supplied with elevator, and every modern appliance for shoe manufacturing. They have also an artesian well two hundred and eighty feet in depth, which supplies pure water for drinking and factory use. The company employs about 150 hands, and their business is increasing very rapidly, so much so that they have decided to build an addition to their present factory, and they have purchased sixty feet frontage adjoining their factory

and will soon erect a building that will be large enough for their requirements.

Newark shoes have always been celebrated throughout the United States as being the finest made, and it must be confessed that The A. Lenz Company have, by their entertry, aided materially in keeping Newark shoes in the lead of all other makes.



ISAAC L SHAT REFRG

W. FRED QUIMBY CO.

SINCE the introduction of manufacturing in the early part of the century there is perhaps no city in the American Union, which has advanced more steadily or experienced a more healthy growth than Newark, N. J. The value and blessings of domestic

industry are admirably illustrated in every section of the town, and it is an undeniable fact worthy of honorable record that its enterprising citizens have in a large measure been the architects of their own fortunes, so the city, collectively, is not indebted to any adventitious or sudden causes for its wonderful and surprising progress, but has steadily advanced to wealth and fame only by the industry, frigality and enterprise of its citizens, and it now, in 1892, stands among the foremost manufacturing cities in the United States. The steady increase of its manufacturing interests, and of its population has become much greater during the present year than within any former period. New streets have been opened in every direction, new structures have

been erected including a large number of manufacturing plants, many of them being the largest to be found in the country. Real estate has advanced in value beyond all former precedents, and every interest of the city is progressing with renewed energy and vigor.

Among the various branches of the leather trade, successfully



ALBERT STEADMAN, SHOE CRIMPER.

carried on in Newark, the house of W. Fred Quimby Co., manufacturers of every description of leather, corduroy and canvas, stands high. This house makes sportsmen's goods in great variety and is deserving of special mention. The business was

established away back in the sixties over thirty years ago, and is admirably conducted, being the pioneer and the only one of its kind carried on in this city. The factory forming an illustration on this page is located on Pennsylvania R. R. avenue, corner South street. It is equipped with every known improvement for about eighty skilled hands who are constantly engaged in producing an endless variety of sporting men's outfits, consisting of leather, dog and sheep skin, cordurov and canvas shooting coats, pants, vests, hats, boots, shoes, leggings, cartridge bags, belts, gun and ammunition cases, English victoria and California cases, and covers, tourist trunks, pistol holders, etc. The firm has been in the trade a long time, and has a reputation that is not easily acquired

for good workmanship and fair dealing, and nothing is omitted to retain the confidence and good will of their customers. The large factory on the Northwest corner of Market and Lawrence street is now occupied as a shoe annex to the plant, where this branch of the trade is at present being conducted. The firm have a large salesroom at No. 291 Broadway, New York. They are the Eastern agents for the L. C. Smith hammerless shot guns, and L. C. Smith automatic ejector gun. They are also the sole Eastern agents for the celebrated blue rock targets and traps. Mr. William Fred. Qnimby is the president and manager. Mr. Edward R. Dimmock being the secretary and treasurer.



W. FRED QUIMBY CO., PENN. R. R. AVENUE CORNER SOUTH STREET.



JOHN J. HEATH, SHOEMAKER AND DEALER.



N. J. DEMAREST & CO., CORNER N. J. R. R. AVENUE AND LAFAYETTE STREET.

N, J. DEMARESTI & CO.,

HARNESS and saddlery manufacture in Newark, although of magnificent proportions and volume, is not at the present day in this respect equal to the days previous to, during, and a few years after the war. In those palmy days New York city was the great head centre for merchants from all parts of the land, and Newark its great workshop. The Southern markets were the acme of all Northern merchants, the West a good fill in, but a side issue. Cotton was king. To-day, how changed; while



N. J. DEMAREST.

the productions in bulk in the above lines fail seriously to reach former days, still the quality and variety have materially improved, keeping pace with all advanced ideas, that the money value of its productions no doubt exceed those of old fashioned times and Newark still maintains its lead and reputation as the great head centre for fine

harness and saddlery. Among those of its manufacturers whose productions rank in the very highest order of excellence may be mentioned the firm of N. J. Demarest & Co. The portraits of Mr. N. J. Demarest and son Daniel Demarest and their factory on New Jersey Railroad avenue, Lafayette and Bruen streets are given herewith. It is with pardonable pride that we are permitted to speak in words of commendation of our many industries, and of none with more pleasure than the manufacture of harness and saddlery and its highly respected representatives, Messrs. Demarest & Co., who are now among the patriarchs of the business, yet full of that young fire, energy

and ambition that never dies in the good business man. During the Franco - Prussian war, among other important contracts for the same purpose, this firm made and delivered artillery harness complete for four thousand horses in eleven working days. This is a fair sample of the "push" that exists in this city of workshops.



PANIEL DEMAREST.



C. L. WINTERS, T. & 22 LAWRENCE STREET.

his success as a manufacturer is highly creditable to his intelligent enterprise and business ability.

Every owner of horses knows the value of a well-made collar and the ease and comfort of those that fit nicely are always largely sought, and they never fail to find them at Winters'.

JOHN BEA

J OHN BEA, wholesale manufacturer of fine patent leather and horse collars, corner Bruen and Lafayette streets, Newark, N. J.

John Bea is widely known as an extensive manufacturer of fine horse collars, his productions having an unsurpassed reputation, and a very extensive sale among the most critical trade in all parts of the Union.

Mr. John Bea, the founder and proprietor of the enterprise, is a native of Germany, and has resided as a citizen in this country for many years. He is a practical man, having served his apprenticeship with thoroughly skilled workmen. Among the first-class goods coming from this factory the celebrated "Kay Collar" occupies a prominent place. Mr. Bea makes a specialty of this, and has largely added to his prestige and reputation by the manufacture of this collar. He employs between thirty-five and fifty men all the year round, all of whom are skilled workmen in this particular trade. Orders can be filled promptly, while all are assured immediate and painstaking attention. We are pleased to note that Mr. Bea's enterprise, which forms an illustration on this page, has proved so successful, as he is one of Newark's most enterprising and honorable business men.

C. L WINTERS

"11E wholesale horse collar manufacturing industry of Mr. Charles L. Winters, whose plant forms one of the illustrations on this page, was established in this city in 1554, by Mr. R. C. Winters, father of the present proprietor. The factory is situated at Nos. 20 and 22 Lawrence street, is admirably fitted up and equipped with every improvement known to the trade, and during the past forty years of its existence has attained an enviable reputation throughout the United States. The output includes every description of horse collars. Special attention is given to the making of the celebrated "Kay Collar," and the finer grades of patent leather work, where only the best of ski led labor is employed. Steady employment is given to about thirty workmen, and all orders, large or small, receive immediate attention. Mr. Winters is a Newarker from away back, and



JOHN BEA, CORNER LAFAYETTE AND BRUEN STREETS.

ELECTRICAL APPLIANCES.

ROM the beginning of time the blinding flash of lightning as it blazed with comet-like splendor along the midnight sky, or sped on its startling zigzag way from zenith to horizon, or like fiery serpents of old flew hither and thither aimlessly through space giving forth anon its sullen roar, compared with which a hundred parks of the heaviest artillery were mere pop gun rehearsals of sound, had

except it were to make pure the sultry summer air, or cleave in twain the sturdy oak or swaying pine. But the playing of its fiery pranks was not destined to last aiways as an unsolved riddle. The genius of a Franklin first bridled heavens high mettled steed; toved with his sparkling beauty; and gently soothed his wild flashing ways till the brilliancy of thought from the brain of a Morse, held him quiet with fine spun lines of iron and steel while issuing his mandate "What God hath wrought:" and the marvellous genius of a Weston with his wonderful skill could formulate a harness of mystic pattern with strength to hold when hitched to the car of progress alongside his well-trained and subservient sister, steam, and under the whip and spur of his genius and daring experiment, making the lighting of the clouds subservient to the will of man. On all sides, to-day every-

where is now heard the sullen note of despair as it comes up from the deep-chested electric giants harnessed to drive, now hitched to the great steamers ploughing the rough main; now to the locomotive flying over mountains and across the plains, on paralell rails. In the printing house and factory, in garrets and cellars we find him to-day bound down and held tight in the wonderful grasp of this wonderful man, and his still more wonderful dynamo.

To the marvellous push, the undaunted zeal, and never say fail spirit, manifested by Edward Weston, and his confreres is Newark indebted to-day for the wonderful developments and almost miraculous growth of the electrical industries, taking rank as they do, among the greatest and richest of her possessions. They should be nurtured and treasured with a care akin to worship itself; and to the men whose masterly skill and deep devotion to science, who have succeeded in working out the electrical mystery and have untangled skeins of this thread of such a rich resource, a deep and lasting debt of gratitude is owed.

Compared with other countries, the prospect held out to the mechanic and workingman, in this is truly one of roscate hue, since the laborer of to-day may be the overseer of to-morrow and the employer of next day. The mechanician of this year may, from the merit of his genius alone, be the capitalist of the next. These facts are not without truthful demonstrations almost daily, at the same time opportunities offering for him to play the same part in the conduct of public affairs as the wealthiest citizen.

Edward Weston, the wizard-like gennus, planing the harness, forging the bands and arranging the plans in the old Washington Street Syna-

gogue with more genius, inventions and patents than dollars, struggling on amid difficulties, discouragements and dangers, for be it

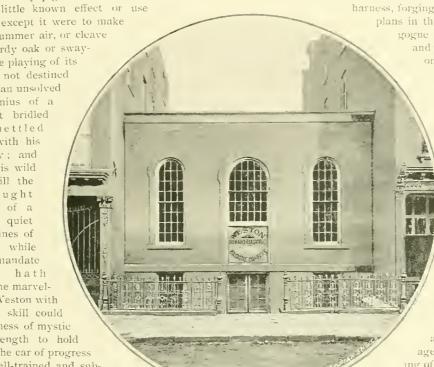
observed to be manipulating lightning is not the safest business in the world, is a the rapid changes which occur in men's careers especially so is this case, brains are at the helm. Among many other beautiful things which Theodore Runvon, New Jersey's illustrious Ex-Chancellor said, in his grand oration delivered at the opening of the exhibition of Newark's industries: "Newark was prouder of her mechanics than any of her natural or acquired resources or advantages." This terse and truthful say-

ing of this scholar with silver tongue has since found actual demonstration in the lasting regard of her people, for the dignity of labor, and the high esteem in which they are held in a massive bronze statue erected in Washington Park, by their munificity.

ence to the memory of Seth Boyden, the great mechanic—an aproned monarch, indeed. No visitor to Newark should be permitted to leave without having had an opportunity of inspecting the institutions, where the wonderful mechanical devices are made for controlling the mighty power known as electricity, as well as the delicate and exact instruments for measuring its strength and testing its power.

The old Synagogue on Washington street holds the honor of being the first factory in the United States for the manufacture of dynamo electrical machinery. There much of the work done in the developing of the electric light, both arc and incandescent, was consummated.

The business was first carried on as a co-partnership, by the firm of Stevens, Roberts, Havell & Weston. The earliest work was done in the direction of producing dynamo electrical machines for electro-plating, and such was the success met with that the machines for this purpose were sold in every part of the



OLD SYNAGOGUE ON WASHINGTON STREET, WHERE THE FIRST DYNAMO WAS MANUFACTURED.



EDWARD WESTON.

civilized world. The introduction of the dynamo electrical machine for electro-plating, electro-typing and similar classes of work, revolutionized the art of depositing metals and effected an immense annual saving in time and material, concomitant with the work on these machines for electro-plating and electro-typing. Mr. Weston carried on his investigation on machines and apparatus for the electrical transmission of power and for electric lighting, and pursued the work with an ardor and earnestness which seems almost incredible, and under circumstances which would discourage most men. Not one of the men associated with him had any confidence in the future of the great art which has since sprung up from his and the few other earnest workers engaged in the same line. The business men considered most of his schemes chimerical, but he stock to his work with a determination and persistence which was remarkable, and his confidence has been abundantly justified by the results.

One of the most serious difficulties met with in the early stages of the work on dynamo machines was the great loss of energy in the machine, and the great amount of heat caused by the loss. Mr. Weston carefully studied all the sources of loss in machines, and by introducing entirely new features, was able to reduce the loss to an infinitesimal amount, and thus produce machines which gave back nearly all the energy expended in driving them in electrical energy for useful work. The types of machines known before his time gave from twenty-five to fifty per cent. of the energy in the useful work, the rest of the energy being wasted in the production of injurious heating of the machine. Mr. Weston, in 1873, changed all this and succeeded in building machines which gave eighty per cent. of the energy expended in driving them, and by further investigations later on succeeded in raising the efficiency until it reached ninety-seven per cent. But this saving of energy was not the only result secured by his work. The saving of energy meant the absence of serious heating of the machines and consequently decreased liability of injury to the insulation, and also meant that vastly more mechanical energy could be transformed into electrical energy by a machine of a given size. In this way the cost of a machine for a given power of conversion was greatly reduced. Without these advances it is safe to say that the application of electricity to electric lighting, power transmissions and the numerous uses could not have been accomplished.

With the perfection of the dynamo machine its field of usefulness became immense, and Mr. Weston's time was spent largely

in opening it up. He attacked the problem of arc lighting from various standpoints and invented and perfected numerous devices for the production of arc lights, and for the measurement of the current and the distribution of the same.

He was the first to make and use the copper coated carbon so extensively employed in arc lighting, and was the first to master the difficulties of making carbons, and it was in Newark that the first successful carbon factory was established.

To make satisfactory carbons for arc lights was at first no easy matter, and a vast amount of experimental work and thoughtful study was needed before the difficulties were overcome. Special machinery had to be designed to grind and mix and mold the material and a great deal of work had to be done to find the most snitable material with which to bind the particles of carbon together, and produce suitable sticks for use in the lamps. These difficulties were all overcome and a vast industry has been established in this line alone. The methods and machinery now employed by the various large establishments in this country engaged in the work of manufacturing carbons were first worked out by Edward Weston.

In the transmission of power by electricity Mr. Weston was very early engaged, and in the old Synagogue, machines for the purpose could be seen delivering several horse powers as early as 1877, with a degree of efficiency which has never been surpassed.

In the line of incandescent lighting Mr. Weston shares with Edison and Swan the honors of much useful work. He attacked the problem long before Edison, and by his process of treating carbons by electricity in the presence of hydro-carbon fluids, gases or vapor, overcome one of the most serious obstacles to the perfection and introduction of the incandescent lamp, and by numerous other inventions contributed in no small degree to the development of these branches of electric lighting. The record of his work in these, and numerous other fields is found in the archives of the patent office at Washington, where is found standing to his name nearly 400 patents for inventions.



PRIVATE LABORATORY OF EDWARD WESTON, HIGH STREET.

In 1886, he gave up his connection with the company controlling his inventious in electric lighting, electrical transmissions of power, etc., and built a laboratory in the rear of his residence on High street. Here, he began a series of researches and experiments with the object of producing accurate, simple and thoroughly permanent electrical measuring instruments for the use of practical electricians and scientists. In this field many of the most eminent electricians of the world had been engaged, including Sir William Thompson, now Lord Kelvin, Professors Ayrton and Perry, but up to the time Edward Weston began his work, there were no really satisfactory and trustworthy instruments to be found such as were suitable to the needs of the practical electrician, who, in his daily work has occasion to make numerous within their walls during which a tour of inspection was made under the guidance of Mr. Weston himself. All through the great establishment, from room to room he conducted us, keeping a running fire of explanation and demonstrating the workings of this marvellous machine, used in the work of manufacturing this tool and that, to be used in turn at the formulation of meters of such delicacy of power, as to be able to measure the gentlest throb of electrical subtlety or the mighty power of the lightning's flash. Now and then laughing the while at our demonstrating our own novity, while striving to catch a glimpse of the hole so small through the minature diamond, which scarcely permits the passage of a ray of light and through which is drawn the ductile copper, making a wire scarcely 1-1000 of an inch in diameter to find



PLANT OF THE WESTON ELECTRICAL INSTRUMENT CO., CORNER WILLIAM AND SHIPMAN STREETS.

measurements of the forces he is dealing with. Mr. Weston's work in this field has resulted in the production of numerous measuring instruments which are remarkable for the ease with which they can be used and for their accuracy. In 1888, a company was organized for the manufacture of these various electrical measuring instruments, and to-day these instruments are the recognized standards of the world, and are used in every civilized land.

The company engaged in exploiting his inventions in this field is known as the Weston Electrical Instrument Company, and its shops are already the largest and finest equipped in the world. These shops, where the electrical wizard himself may be found, are situated on the south side of William street, near High, and are worth a visit to all, and more especially to the scientifically inclined. One of the red letter days of the writer's life was spent

its place in turn in the delicate spring answering to the electrical touch and correctly measuring volts or indicating amperes. The two more important departments of the great factory are those of drawing and testing.

In the first, the ideas of Mr. Weston find their place on sheets of drawing paper and here employment is given to six assistant draughtsmen, and this year's work will amount to 2,000 sheets. From here the idea or invention goes on from department to department, till it becomes the perfected machine and has reached the testing room and is tested, and if right, approved. The institution, though young in years, requires nearly 200 expert men and women for its conduct.

No hours can be more agreeably or profitably spent than in the workshops and laboratories, where electrical instruments are made and electricity is dealt with.

The beautiful photos which grace these pages and which the artist has so faithfully portrayed, will show, along with this short resume of his inventions, life and work, what an integral part of Newark's electrical industries is the result of the genius and efforts of Edward Weston.

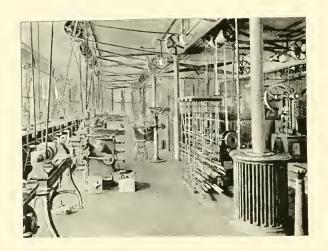
When the time comes (may it be long delayed) when Edward

Weston's work is done, and his apron laid aside for the last time, may the record of his mighty achievements be transferred to imperishable bronze, and the statue to his memory take its place in the sight of generations to come. By the side of the statue erected to the memory of Seth Boyden, the mechanic, may stand that of Edward Weston, the electrician.

INTERIOR VIEWS OF THE WESTON ELECTRICAL INSTRUMENT CO



LABORATORY.



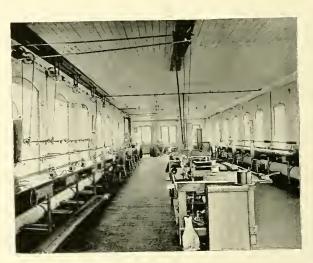
TOOL DEPARTMENT.



MANUFACTURING DEPARTMENT.



DRAUGHTING DEPARTMENT.



ASSEMBLING DEPARTMENT.



MILLING DEPARTMENT.

THE JEWELRY INDUSTRY.



EN search with infinite toil for the precious stones and glittering gems which nature has hid away in the cracks and crevices of the rock and amid the sands of the far-away African, South American or Gongoldian mines, and when he has found the sparkling diamond, the rich topaz, or emerald, and is rejoicing at his new-found treasures, he little knows or little cares where it will go, nor what manipulations it must undergo, his ambition, as a rule, stops with the ducats his find will put in his purse, while the buyer must needs look up a

lapidary whose genius and skill will bring out the beauties and fit it for the markets of the world. In its journeys from hand to hand, from place to place, in search of the artist's skill, it in all probability finds among the goldsmiths, jewelers and lapidaries in the city of Newark artists to vie with any in the known world. The virgin gold of the California mines, and the silver from Colorado and Nevada, have their part to play, and as they pass the deft fingers of the Newark jewelers such changes are wrought as would startle and surprise the alchemist who labored for ages on and on only to fail in the accomplishment of the one grand object sought, viz. the conversion of the baser metals into rich and

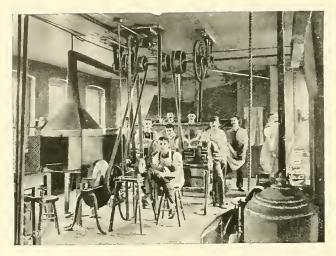
shining gold. Had the great minds in the past, which had the alchemistic trend of thought which led them into dark crevices and hidden recesses, but worked in the open daylight, following such lines as our skilled artists, goldsmiths, silversmiths and jewelers work on to-day, instead of failures and disappointment marking their career they might have exclaimed "Eureka! I have found it!" and been the originators of such a grand industry as would have shed a halo of lustre around their names and established a fame lasting with time.

CARTER, SLOAN & CO.

A MONG the nearly one hundred firms engaged in this popular branch of industry, none has taken a higher stand or watched its growth more closely than Carter, Sloan & Co., which came into existence November 1, 1841, under the firm name of Pennington, Carter & Doremus, each individual name of which having a fame co-existant with the rise and progress of Newark to the high standing of her manufacturing greatness to-day. Their factory was first established on Broad street, just below Green, but very soon after Aaron Carter, Jr., bought out his partners, associated others with him in the business, and removed



CARTER, SLOAN & CO., MULBERRY AND EAST PARK STREETS.

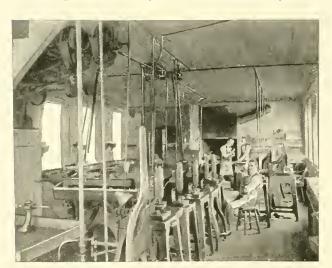


MELTING AND ROLLING DEPARTMENT, DAY & CLARK

to a little factory on Green street near Broad. In consequence of increasing business the more capacious building at the corner of Park and Mulberry streets, was purchased, and in July, 1853, the jewelry manufacturing establishment of the firm was moved to these new and more commodious and convenient quarters. The firm name at that time was Carter, Pierson & Hale. It is not out of place in this connection to mention the interesting fact that the power made use of by the firm at this time was derived from the engine built by the illustrious mechanic and inventor, Seth Boyden, which had been used in the machinery exhibit at the World's Fair building, known as the old New York Crystal Palace. In 1873 the increasing demands of the firm's growing business made it necessary to enlarge their factory, and extensions were built on both Park and Durand streets, making the building a square letter U, a speaking photo of which our artists have transferred to these pages.

On January 1, 1881, the present firm name of Carter, Sloan & Co. was adopted. They have one of the most complete plants for the manufacture of gold jewelry in this country, which includes all the improved devises in labor-saving machinery, enabling the firm to employ, as they have for many years, more hands in the manufacture of solid gold jewelry exclusively, than does any other manufacturer in this country, England, France or Germany, as far as any record is attainable. At the present time there are at least two men actively employed in the factory who came with the original firm as apprentices over fifty years ago, when the business was organized.

In this grand old factory have been trained many of the most



PROCESS DEPARTMENT, DAY & CLARK.



MAIN JEWELRY DEPARTMENT, DAY & CLARK.

successful jewelry manufacturers in Newark, as well as in many other branches of business, who have from time given up their positions to organize a business of their own.

The members of the firm as at present organized, are Aaron Carter, Jr., of Orauge, N. J.; Augustus K. Sloan, of Brooklyn. N. Y.; Courtland E. Hastings, of New York City; George R. Howe, of East Orange. N. J.; William T. Carter, of Newark, and William T. Gough, of New York City, while Aaron Carter, Jr., has remained the honored head of the firm during all the changes of the fifty years now closing. He has taken no active part in the business for the past twenty years.

DAY & CLARK.

THE really useful men of Newark are those who have lent a helping haud in the development of its manufacturing interests and aided in fostering those branches of trade for which the city is now widely noted. In no branch of skilled industry perhaps in the world, has more rapid advances been made than in the jewelers' art, and the industrial pursuits of a kindred nature. In former years, especially for the finer and more artistic productions in these lines, the American people were compelled to look to European countries for their jewelry supplies, but to-day American jewelry as produced in Newark, stands unrivalled in excellence of workmanship, beauty of design and cost of manufacture, by the best goods made in foreign countries.

A prosperous, popular and thoroughly responsible firm devoted to this important line of industrial pursuits in the city of Newark, and well worthy of more than passing mention in these pages, is



FINISHING DEPARTMENT, DAY & CLARK.

that of Messrs. Day & Clark, manufacturing jewelers, located at the southwest corner of Marshall and Halsey streets. The business was established in the present century, and has developed a large and influential trade with some of the leading houses in this city and throughout the entire country. Their products embrace everything in the line of solid gold hairpins, bracelets, brooches, necklaces, charms, chatelaines, lockets, collar and cuff buttons, scarf and lace pins, studs, gold mountings for diamonds and other rare and precious gems, etc. A specialty is the manufacture of novelties of rare and unique designs in solid gold, all of which are made by thoroughly skilled artistic workmen and guaranteed to be as represented, while the prices are very reasonable. The members of the firm are wide-awake, enterprising and courteous Newark gentlemen, reliable, honorable

KREMENTZ & CO,

A T THE South-west corner of Chestnut and Mulberry streets, the firm of Krementz & Co., carry on their extensive jewel-ery manufacturing business. They occupy the greater part of the large four story brick buildings, having a frontage of 185 feet on Chestnut and 55 feet on Mulberry street, also the rear extensions. Our artist has given a faithful portrayal which has been transferred to these pages.

The business was commenced in 1869, in a comparatively small way by Messrs. George Krementz and J. A. Lebkuccher, and the same parties with the able corps of assistants which they have gathered about them still carry it on, and have enlarged it to its present proportions. Messrs, Krementz & Co., manufacture a



KREMENTZ & CO., CORNER MULBERRY AND CHESTNUT STREETS

and prompt in their dealings, and justly merit the success they have achieved. A visitor to this great industrial centre could not spend a few hours to better advantage than in taking a look through this or some other representative jewelry manufacturing establishment, under the special guidance of one of the polite gentlemen of the proprietorship, any of whom would be glad at any time when not otherwise specially engaged, to show them the interesting parts of the business of manufacturing the jewelry seen almost everywhere as filling the show cases and safes of the retailers, or in wear by the thousands they meet on the street or at social gatherings. The premises utilized are spacious and commodious, comprising several departments, four of which our artist has given faithfully a portrayal of on these pages from photographs. They are admirably fitted up with all the latest improved machinery and appliances for business and manufacturing purposes.

large line of jewelery, principally for ladies wear, and their productions have attained a high reputation with the trade throughout the country. One of the specialties manufactured by this firm we shall not fail to mention, and that is the "Krementz one piece collar button," the invention of Mr. Krementz, which has become the standard collar button of the country, and which is largely exported to Europe. As a mark of the progress in the art, this button now made of a single piece of metal without seam or joint was formerly made of several pieces soldered together, any one at all acquainted with the manipulation of metal will see at once the superiority of this button, the metal having suffered nothing of the annealing effect of the soldering process of the old method, with the consequent softening which must eventually follow.

The business offices and salesrooms of this company are at 152 and 184 Broadway, corner of John street, New York city.

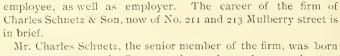
CHARLES SCHUETZ & SON.

AS WE turn back the pages of Newark's industrial history, in our search after truth and data from which to formulate

matter which will not only be read with interest, but will furnish such a regarnering of facts as well, from which future searchers may draw as from a spring of sweet waters, almost every page is found dotted over with facts and figures in regard to those interests which have their foundations in the manufacture of jewelry. As we have only to do with those engaged on general lines thereof, in this article, and at this time, it will be our purpose to show how large a part this industry has played in the upbuilding of Newark's greatness, as a manufacturing and business city, and what a bright prospective it presents for its future. Calling the attention of the reader to the part being enacted by Charles Schuetz & Son, among the managers of the nearly one hundred establishments, which are co-workers in this special branch of industry, we open up a very interesting and not unprofitable study. The plant which has been gathered at No. 211 and 213 Mulberry street, will compare very favorably indeed, with any other in the city of

Newark, selected and arranged for the manufacture of jewelry in a great variety of styles, lines and patterns. As the growth of the jewelry industry has been phenomenal for the past two decades we may assuredly look during the present, for a continuation just as great, and doubtless it will be greater still in the next decade.

One fact in connection with the jewelry manufacturing industry in the city of Newark is especially notable, and that is while there is a pleasant rivalry among them, there is no perceptible attrition or jealousy, and taking them together they are indeed one family having one common interest, and in the continued growth and enlargement of the jewelry manufacturing interests equally interested and in a healthy onward and upward career for the city wherein are the homes of their skilled workmen and in the rapid growth thereof, for the happiness and prosperity of



in Germany, from whence he came in 1851, settling in this city and residing here ever since.

Mr. Fred. A. Schuetz, the junior member, is a native of this city, attending and graduating from the Green Street German and English School and the Newark Academy.

The firm was established in 1876, originally locating in Crawford street, from whence removal was made in 1882, to the present eligibly located premises embracing two floors, each 30 x 100 feet in dimensions, equipped with every convenience and facility for the successful prosecution of the business. Employment is given to a force of seventyfive hands in the manufacture of every description of fine gold jewelry, the establishment having a deservedly high reputation for the superior quality of its productions. Only expert workmen are employed, and the most careful supervision is maintained over every detail of manufacture so as to secure the highest grade of excellence.

The business has grown from its inception, and the firm has deservedly commended itself to the favor and confidence of the trade.

This is only another of the many examples which Newark presents in this line of industrial pursuits, where thrift follows close on the footsteps of a watchful care of the minutest detail of a great business. A visit to the factory of Charles Schuetz & Son would convince the most exacting, after a moment's contemplation of the methods pursued, that the firm not only know how do business, but at the same time do it, in a way that is strict, but pleasing. When the roll of business success in this field where, if the term may be used, such a wonderful conglomeration of industries exist the name of Schuetz will be found written well up towards the head. Another proof in demonstration of the fact, that success follows fast where brain and brawn join hands in the race for the victors palm.



CHARLES SCHUETZ & SON, 211 & 213 MUL-BERRY STREET.



CHARLES SCHUETZ



FREDERICK A. SCHUETZ.

THE W. C. EDGE Co.

THE artist who made the photo had a full conception of his subject, as any one will see at a glance, as he turns the pages of NEWARK ILLUSTRATED, and stops for a moment to study the finished picture as the engraver has so nicely and so expressively made its transference to the plates used in printing it here. Few plates presented surpass this, which is indeed, an elegant representative figure of the original. In these buildings are arranged the plant of the jewelry manufacturing industry conducted by The W. C. Edge Co., of which Mr. William M. Clark is president, Mr. Charles Edge, vice-president, Mr. W. C. Edge, treasurer, and Mr. Walter Edge, secretary. While it is saying nothing in derogation of the hundreds of artists, inventors and mechanicians whose wonderful mastery of the mechanics' arts, it is due that more than a passing notice should be given in this article to Mr. William C. Edge, who has won not only a lasting fame for himself, but has done so much, and perhaps more in the last decade toward the upbuilding of Newark's industrial greatness than many men, who are more

pretentious, engaged in like pursuits. Not unlike the great majority of our great inventors, mechanics and artists, it hasn't been all smooth sailing with the subject in hand. The ups and downs in his life have not been a few. In smoky London where he was born, he learned the jewelry trade with his father, and later was employed by several large jewelry firms in that great leading city of the old world's industries.

In 1865 Mr. Edge came to America, where better opportuni-

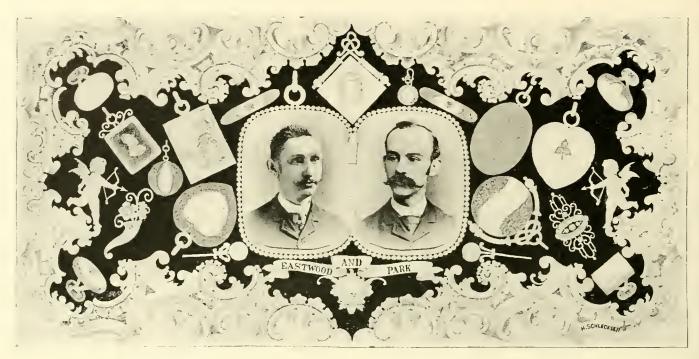


WILLIAM C. EDGE.



ties offered for the pursuit of his calling. He first obtained employ ment of Chatelin & Spence, of New York, where he introduced what is now called satin finish. After a short period he came to Newark and entered the employ of Durand & Co., where he remained for several years, becoming acquainted with the new world methods. After this he started business for himself and on his own account supplying the large New York dealers. This had not been going on long when, through the machinations of a gentleman who had worked himself into Mr. Edge's good graces, becoming his partner, proving false, and finally compelling him to return to the bench. After working at the establishment of Miller Bros., where he introduced the method of turning over the edge of pins ear-rings, etc., now so common in collar buttons, he commenced business again, and later joined hands with Smiley & Dorrance. This firm afterward became known as W. C. Edge & Sons, but lately was incorporated under the New Jersey State laws as The W. C. Edge Company. This company is known and patronized throughout the United States as well as abroad, and are manufacturing goods under the protection of the patented inventions of W. C. Edge, but now the company's property. Woven wire fabrics of 14 carats fine, are a principal feature of their industry. They also show a handsome line of other work in pure gold. This wire is also used in various weaves for saddlery hardware, upholstery work, fancy ornaments, dog collars, etc., etc. The latest inventions are "Edge's Excelsior Rein Holder," and patent "Aluminum Horse Shoe," which are a success.

Being one of those undaunted spirits who never say fail amid the most trying ordeals, he kept working, and while others of his associates were spending their time where pleasure rules the hour, he was engaged in the more profitable employment of delving deep after hidden mysteries and unravelling the skein of the mysterious, around which are gathered so much of that undiscovered in the realm of science and art. Not so much was the searching of his busy mind engaged in the work of discovering new principles, but in the work of applying old ones in new ways.



DESIGNED BY EASTWOOD & PARK, MANUFACTURING JEWELERS, MARSHALL AND CRAWFORD STREETS.

GEORGE A. SCHELLER

EASTWOOD & PARK

IN A town in which the manufacturer of jewelry is on a phenomenal scale and has great weight in determining the general activity, it would be the natural inference that there should be found individual experts in the business, men who have all the technique of the various branches of the jewelers' art at their fingers ends, and who can and do outclass the then wonderful workers of olden days. An example of such a one is found in Mr. George A. Scheller, of 290 Market street, near Pennsylvania railroad depot. Mr. Scheller is one of those rare men, who can take the raw material and make a watch from beginning to end; artistic worker in chains and rings, in setting of diamonds and other precious stones, and in solid gold and silver work. With the accomplishments of the thorough artisan, Mr. Scheller

GEORGE A. SCHELLER.

combines the taste of the artist, and is withal a scientifician in the matter of time, so that he has become to Newark its sextant and chronometer.

Naturally he is highly regarded in both industrial and social circles, and his highest testimonial is his success.

His handiwork is all over the city, and many a watch that guides the movements of millionaires, business men or mechanics comes to him when occasion demands for his professiona scrutiny. Mr. Scheller makes a specialty of American watches, and car-

ries a fine line of jewelry.

He is authority on diamonds and other precious stones.

It is noteworthy to record the advances made by young and enterprising firms engaged in business pursuits, which, by their incessant and ever-ready efforts, have made their calling a success. One young firm who creditably represents the jewelry trade by their enterprise, is that of Messrs. Eastwood & Park, whose elegant design is herewith given. The works, situated corner Washington and Crawford streets, are tastefully fitted up with the necessary machinery, appliances, tools, etc. The unrivaled and beautiful designs manufactured at their works have made the firm popular and have brought to them a notable line of customers.

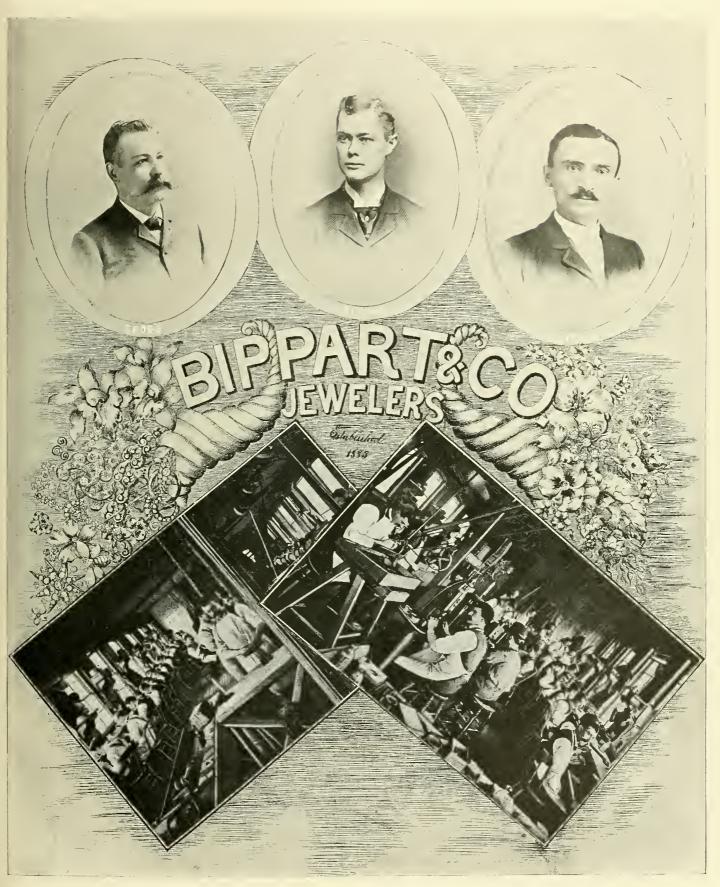
BIPPART & CO

A MONG the prominent firms who have won honor and distinction in the jewelry trade may be mentioned that of Bippart & Co., whose beautiful design forms the illustration on the opposite

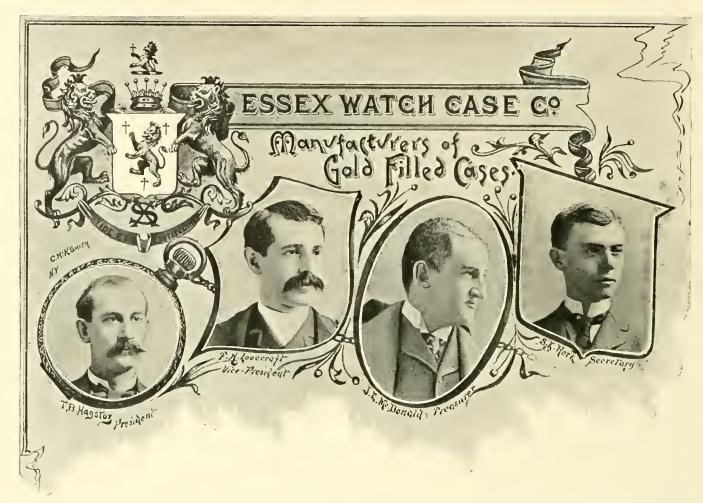
page. The works, on the corner of Marshal and Halsey streets, established in 1885, are admirably equipped with every convenience and improvement known to the jewelers' trade. A large number of skilled artists and mechanics are constantly employed in designing and manufacturing the elegant and useful novelties in gold and diamond jewelry for which the firm of Bippart & Co. is so well and extensively known throughout the leading cities of the United States and Canada.



SHOP AND SALESROOM OF GEORGE A. SCHELLER.



DESIGN OF BIPPART & CO., MANUFACTURING JEWELERS, MARSHALL AND HALSEY STREETS.



THE ESSEX WATCH CASE CO.

THERE are perhaps no articles of American manufacture in which there has been a greater reduction in the cost, than that of watches and watch cases.

But a few years since a gentleman's gold watch, of fairly good quality would cost not less than \$100, and at the present time a fine article can be purchased for half that amount, and even less. This change is brought about, not only by the decrease in the cost of manufacturing by improvements in machinery, but also by the improved methods of construction. Especially is this noticeable in the manufacturing of watch cases.

The old method of making a gold watch case of sufficient strength to retain its shape, and withstand the wear and tear required of it, must have a large percentage of precious metal stored away out of sight beneath the surfaces, where it is of no manner of use, except for the additional strength imparted by its presence; or, on the other hand, if the metal is not placed there, the result is a weak, flimsy shell of a covering to the movement that is soon bent out of shape, admitting dust and dirt which soon ruins the watch.

The Essex Watch Case Co. was organized in the fall of 1886, with the following officers: George Courvosier, president; Timothy Scales, secretary; James H. Fleming, treasurer and general manager, and in March, 1889, the entire business was purchased from the original stockholders by a syndicate consisting of T. B. Hagstoz, F. A. Lovecraft, J. E. McDonald and S. E. Rork, who at the present time occupy the respective offices as above, Mr. Alexander Milne being one of the principal stockholders and promoters of the enterprise. This concern is the pioneer of this industry in Newark, and is now manufacturing watch cases which are marvels of beauty, strength and economy.

The first of these three great features in the class of articles produced, is arrived at by superior workmanship, and the second by constructing watch case parts, consisting of three separate and distinct plates of metal as follows: On the outside a heavy plate of solid 14-kt. gold of sufficient thickness to allow of being engraved or carved, and to withstand the wear for the length of time of the average life of man; this is backed up by a second plate of hard, rich composition metal to give it strength, which is covered with a third plate of solid 14-kt. gold to prevent oxydization; thus forming by the union of the three parts one homogeneous plate of metal out of which the watch cases are constructed. These cases are known as gold filled or stiffened. Watch cases produced in this manner are far superior to the solid gold, except in instrinic value, on account of their great durability.

The popularity of these goods is such, on account of their great strength, that the thin flimsy unserviceable solid gold cases have been forced from the market; and being as handsome as the solid gold and costing very little more than silver cases, the latter are rapidly being replaced by them.

These watch cases are made in plain polished, satin finished, engine-turned, chased or engraved, raised colored gold ornaments, enameled and stone or diamond set, in fact every style in which solid gold cases are made.

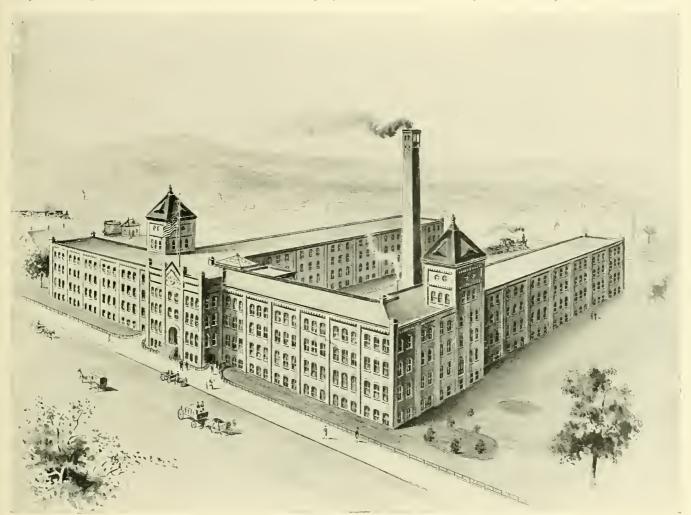
The unprecedented growth of the Essex Watch Case Co. is the best evidence of the great merit in the goods produced by them. Having commenced business on the third floor of the Barrett-Brown building, corner N. J. R. R. avenue and Hamilton street, in September 1886, with about a dozen hands, has steadily grown until in January, 1890, they were compelled to move to the large new building, Nos. 47, 49, 51 Chestnut street, where are now employed over 100 hands, and considerably over 100 cases are produced each working day, and before the end of 1893, will have manufactured over 100,000 cases.

THE CRESCENT WATCH CASE CO.

A MONG the industries carried on in the city of Newark that conducted by the Crescent Watch Case Company is worthy of special mention. A visit to the great buildings, a very striking photo engraving of which may be seen on this page, where this essentially new branch of her industrial pursuits are carried on in Newark, fills the visitor with the conviction that the end of her industrial progress is not yet, and that the trend which set in years ago still continues Newarkward, as one after another of the teeming manufacturing industries of the country find their way hither, so much nearer does the modest city on the Passaic become the manufacturing centre of the Western continent. It is enough to say, that the goods manufactured by the Crescent Company

great buildings in which it is housed are situate on North Thirteenth street and the Montelair branch of the D. L. & W. Railroad, between Fifth and Sixth avenues. The readiness with which the railroad granted the Crescent company a siding of more than a quarter of a mile, in order to give them the absolutely necessary freighting facilities, proves very conclusively that the managers of the railroad know a good thing when they see it.

Situate on the high grounds of the northerly section of Newark, known as Roseville, the watch case factory of the Crescent company is picturesque indeed, and clearly shows just what it is, the most extensive of its kind in this country, if not in the world. This industry was started in 1882, as the Chicago Watch Case Company. In 1885 they removed to Brooklyn and became the Crescent. In 1891 the plant, machinery, etc., was transferred to



CRESCENT WATCH CASE COMPANY, 65 TO 85 NORTH THIRTEENTH STREET.

have a reputation for purity and excellence unexcelled. With one of the best plants for the business in the world, with all the latest improved labor-saving machinery and mechanical devices for doing the work in the best possible manner, and with a large corps of skilled artists selected after severe and critical trial, it is little wonder that such a desirable success is attained.

Among the many industries carried on in Newark, there are few indeed, where the inventions of the genius of her mechanics has a better display of results than can be seen in the manufacturing of watch cases at the Crescent. The rapid growth of their business has few precedents, and they now meet the markets of the world in the great variety of cases they present, and their ready sale is an unrefutable evidence of their merit. No citizen having the material interests of Newark in view, and the casual visitor as well, should fail to take a long look at the elegant plant of the Crescent in which is carried on the watch case industry. The

Newark and incorporated, with Walter H. Fitzgerald, as president; Irving Smith, vice-president; A. M. Crommelin, treasurer; C. L. B. Crommelin, secretary, and August Beucke, superintendent.

The richness, strength, durability and beauty of style aud finish of the watch cases which this establishment turns out, are marvels among the marvelous. A firm and unalterable determination from the start to use nothing but the best and purest among materials, to employ artists of the highest order and workmen of skill and character, they have built upon a foundation that knows no shaking, an industry of grandeur and promise, and which stands forth in its beautiful proportions a model for the world. The product of the Crescent, with the capacity of a thousand skilled operators, reaches into the millions of gold filled and solid silver watch cases of an endless variety of styles and patterns. The watch words of the Crescent are reflected from every watch case turned out in their purity and beauty.

THOMAS BENFIELD.

A S a community we are distinctly a practical, common-sense and productive people, and our efforts are devoted almost wholly to manufacturing a wide and varied assortment of articles of utility and luxury, and forwarding many of them to distant climes and countries. Goods of Newark manufacture may be found in all the great markets of the world, and in these peaceful pursuits many men have not only reached affluence, but have also achieved a world-wide reputation through the excellence of the wares they have produced.

Of this latter class none are more worthy of mention than Mr. Thomas Benfield, of Woodside, an excellent likeness of whose model factory is presented on this page. In some respects this is

only for the class of work done, but also for the comfort and well being of the employees, which has been made a special feature. Mr. Benfield very sensibly believes that if an employer provides reasonable, cleanly pleasures for his hands and a comfortable place in which to enjoy them, it is not likely that they will squander their money in saloons, but in a majority of cases will become respectable and good citizens, and acting upon that belief this liberal and kindly employer has placed in his factory for the use of his men, reading rooms, billiard and pool rooms, and other social pleasures, with which to cultivate their minds or pass their leisure moments pleasantly.

In spite of his kindly heart and his efforts to better the condition of those whom he employs, Mr. Benfield is a shrewd and farsighted business man, as is amply proved by his successful and



PLANT OF THOMAS BENFIELD, SUMMER AVENUE.

without exception the finest factory building in this, a city of factories. Its dimensions are 165x135 feet. It is in its interior plan and fittings that its owner has displayed that intelligence and taste that make it a model building, and one for manufacturers who intend erecting factories and workshops to pattern after. It is located at the corner of Summer avenue and Halleck street, in that portion of the city known as Woodside, and is a handsome and striking brick structure three stories in height and was erected at a cost of between sixty and sixty-five thousand dollars. It stands upon a site, the dimensions of which are 200 x 300 feet, and it will thus be readily seen that if at any time more room is required, and it is probable that that point will be reached in the near future, there is ample land upon which to add extensions or erect additional buildings.

In every respect it is most thoroughly equipped and fitted, not

enviable business career. He began the manufacture of watch cases in 1882, at the corner of Gold and Beekman streets, New York city, as a member of the firm of Benfield & Tissot, and the business prospered from the beginning. Four years later the firm removed to the corner of Barclay and Washington streets, New York, and still it grew. In 1888 Mr. Benfield purchased Mr. Tissot's interest, and in July, 1890, he began the erection of the splendid factory shown in the accompanying illustration. In addition to the business of manufacturing watch cases, Mr. Benfield is a large stockholder in the Wymble Manufacturing Company, silversmiths, whose work is very superior, and whose goods have a world-wide reputation, and also in the Benfield & Milne Manufacturing Company, manufacturers of enameled letters and signs. All of these industries are housed in buildings shown in cut.

CHARLES NOBS.

A MONG the vast number of peculiar manufactures which characterize industrial Newark, none can claim more deserved attention than the making of solid hollow gold, silver, copper, brass and composition wire. It has a deep interest for the student of precious metal working, and it was in Newark that the art attained its highest development. Twenty-five years ago Mr. Charles Nobs was devoting his attention to it, and his was the pioneer plant in this business. Now the product of the establishment which that gentleman and his two sons have built up, at Nos. 61 and 63 Mulberry street, and No. 24 Boudinot street, is famous wherever there is a manufacturing jeweler. It is a wonderful business, this working up of precious metals for utilitarian purposes, and some of the results are incredible to

ments follow in rapid succession, and rich new products are presented as the cycles of time move on.

The manufactory is very complete in detail of equipment. The large slide valve engine which operates the machinery, was built by Hughes & Phillips, also of Newark. The machinery for wire making and bringing other material to perfection, is profuse and varied. The expert operators of the machines are of both sexes, a battalion of the best class of workers to be found in any branch of industry, and the highest commendation of their skill is the excellent repute in which their handiwork is held. Every consideration in the conduct of the concern gives way to the essential point of quality. This is not only the desideratum, but the absolute demand.



CHARLES NOBS, MULBERRY AND BOUDINGT STREETS

one not thoroughly informed. To say that a tiny block of gold may be drawn out to a thread fine as the fibre of a silk-worm, so fine as to be almost indistinguishable to the unaided eye, seems like an appeal to the credulous, but it is done every day at this establishment and not considered extraordinary. And this is but one of many curious examples in gold and silver wire-making for which the concern is noted. To achieve this and other peculiarities of the manufacture of gold and silver wire, demanded a knowledge of metallurgy, an insight into mechanical principles, and a keen brain to devise the intricate machinery, upon which successful results depend, is not the work of a day nor a decade. It was the outcome of deep, patient, well-directed thought, and a capacity for discovering the correct means to reach a desired end, It is the story of every brainy craftsman who, knowing what is wanted, with clear head and dogged determination, sets himself about the act of solving the problem. Thus it is that improve-

While the manufacture of solid hollow gold and silver wire is a prominent feature of the establishment, the principal products of the factory consists of watch case materials used by watch case makers such as crowns, pendants, bows, joint case pins, watch case springs, antique crowns and antique pendants. With these, as with all else that the factory makes, reputation depends on worth. It is a reputation honorably won, deservedly held, and beyond peradventure, to be maintained as long as the establishment is under the control of the brains and energy that made it.

The beautiful photos which illustrate the plant where the industry of this enterprising company is carried on, give a speaking representation of the external, and somewhat of the internal appearance of the factories where they turn out their rich products for the markets of the world and the delectation of the admirers of the beautiful, everywhere.

NEWARK WATCH CASE MATERIAL COMPANY.

IN CALLING attention to the industrial pursuits which are carried on in the city of Newark, the upgrowth of which in manufacturing greatness has left her with few peers, when the extent of her territory and population are considered. With a little more than 200,000 people within her bounds, she outstrips all competitors with the exception of the two great commercial cities, New York and Philadelphia, which have more than a million each, and in the special branch which is now under consideration, she leaves even these big sister cities out of sight in the race. Indeed, all the watch case material manufactured on this Western Continent is made in the factories of Newark.

The stem winding apparatus which takes the place of the old obsolete key in every American made watch, is turned out of Newark factories. It is not surprising that Newark should hold the industry of watch case material manufacturing, when she has in the



WORKS OF THE NEWARK WATCH CASE MATERIAL CO, WARD AND MECHANIC STREETS.



ALEXANDER MILNE, PRESIDENT.

thousands of her happy homes the skilled artisans domiciled so necessary to run the machinery, and whose skillful hands handle the tools. It is passing strange too, that the writer should have the opportunity of recording the fact, that almost the entire product of the watch case material is used up, on this side of the ocean, and that the factories engaged in this work are concentrated within the corporation limits of the city of Newark, and it naturally follows, and as a matter of course becomes very much of an item, in the grand integral part of the whole of her manufacturing greatness.

Considering its late introduction, as it seems but yesterday when it was first introduced, and then on so small a scale, it appears that the influence of magic might assuredly have been at work.

While the output of this great industrial establishment is consumed very largely right here at home, each one of the many necessary little articles having some absolute qualification for meeting certain ends, in the successful conduct of the sister industry of watch case making. Yet other centers of industry are not averse to purchasing the surplus from Newark's watch case material manufacturers, which carries with it in the trade mark it bears, the very highest qualities of perfection.

The beautiful illustration showing the goods manufactured by this firm, as is easily seen in the line of a division of labor and specialties. With the growth of the watch-making industry of the United States, and more especially the stem-winding watch, it became absolutely necessary that there should be a special business, having for its purpose the furnishing of the stemwinding attachment to those engaged in the manufacture of watch cases. Prior to 1874, when this company commenced to

manufacture these artleles, they were all imported direct from the Swiss manufacturers, as all stemwinding watches were made in that country. The president, Alexander Milne, of this company, being a jeweler, and wideawake and alert, saw the opportunity to start the business here. His first move was to associate himself with a Swiss who had some practical experience in the watch-case line. The necessary tools and costly machinery which were indispensable adjuncts, were soon collected, and it was not very long before the case-makers were purchasing their stem-winding crowns and other necessary material right here at home. There was



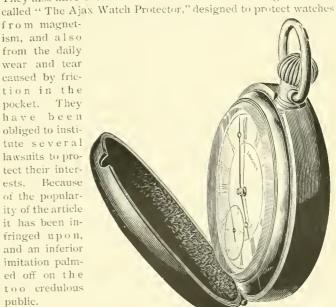
DESIGNS OF THE NEWARK WATCH-CASE COMPANY.

no more going abroad, for the progressive spirit of a thoroughgoing Newark mechanic had made it unnecessary through his genius applied. Although the beginnings were small, less than a half dozen men being employed, yet the growth of the industry has been phenomenal, and the company now have in their employ nearly one hundred men.

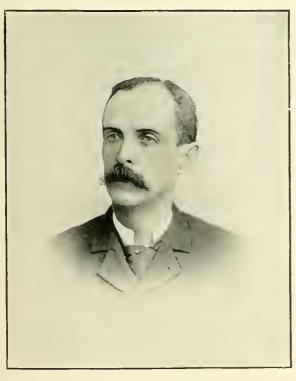
In the person of W. S. Richardson, the treasurer of the company, President Milne has a helpmeet indeed, his clear, keen eye takes in at a glance every move of man or machine, and his excellent judgment gives warrant of successful management and the best of results. It is plainly due to the efforts of this company, and especially of President Milne and Treasurer Richardson that Newark has become the centre of the watch-case manufacturing industry of America. For years they have persistently championed the cause.

No claim is made that the beautiful photo engravings of this company which adorn these pages is placed there for advertising purposes, but only that the public may be made to fully understand the variety and scope of the work done by this company. They also have invented and are now manufacturing an article

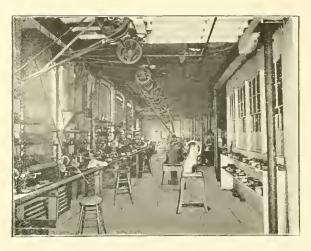
from magnetism, and also from the daily wear and tear caused by friction in the pocket. They have been obliged to institute several lawsuits to protect their interests. Because of the popularity of the article it has been infringed upon, and an inferior imitation palmed off on the too credulous publie.



AJAN WATCH PROTECTOR



W. S. RICHARDSON, TREASURER.



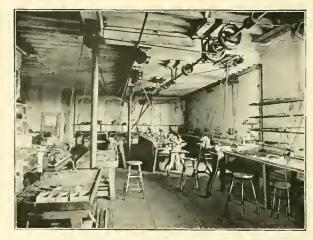
CROWN DEPARTMENT, HENRY G. LEFORT.

H. G. LEFORT.

[N NO city of the United States (and few in any other part of the world) is the industry of watch case material manufacturing carried on except in Newark. This industry in former years had its home in Switzerland, away over the waters of the great seas among the mighty Alps on Alps, where liberty was born. Indeed, it was not till within the last few decades that the Western world felt the full impulse of the mighty throb which sent the manufacturing of watches, watch cases, and all the materials necessary in the outfitting of a lady or gentleman with an elegant watch, to the shores of America. And what more natural, where the business of making the fine wheels, the nimble spring, the delicate pointers and beautiful dials, and finally or last, though not least, the manufacture of the cases of unapproachable beauty to enclose the "works" in, came to America, and came to stay, that the sister industry of the making of watch case materials, a branch so eminently necessary to put the finishing touches on, should



HENRY G. LEFORI.



TOOL DEPARTMENT, HENRY G. LEFORT.

gradually lose its attachment to the home of its parents and come to America too. It is not so long ago but what many, now in the full vigor of life and active yet in business, can remember when the stem-winding watch attachment was born, and it is safe to say that if the great industrial city of Newark was not the place wherein it was born, it had its christening here, and soon it became an industry of such promise, under the careful handling of the deft fingers of Newark makers, that the man, woman or child who carried a watch must needs have one that had this superb attachment originally, or which had been transformed into a "stem winder," and it must be Newark-made at that.

The business was initiated by Mr. Henry Lefort, in 1872, who associated with him two other gentlemen, under the firm name of Lefort, Milne & Jourdan. This was but shortly after the event of the introduction into the best watch society of the stem-winding apparatus, and its coming into general use. The company began business in a small way, as the demand was limited. It was a young industry and it required rather more than the average amount of business courage to start it, and acumen to conduct it successfully. It had its tutelage away up on the top floor at the corner of Columbia and Elm streets, in a room about thirty feet wide by sixty long. The young industry was in the right hands. The skill to manufacture, and the brains to present the goods made a combination which was sure to win, and soon the demand for the excellent goods made became so general that more goods and greater facilities for their manufacture was the pressing need. To meet these accessities the firm packed up their machinery and tools and marched them away to the "Coe" building, on Marshal street. In 1870 the firm dissolved, and Mr. Lefort and his son, the present proprietor, who had gained an insight into the business, continued to carry on the establishment. So rapidly did the business develop under the excellent reputation their products were gaining wherever watches were made, they were forced to move again, and into still more commodious and advantageous quarters, which were found in the three-story brick building, at 60 and 62 Arlington street. Here successes followed in rapid succession until 1890, when Mr. H. G. Lefort purchased the machinery, tools and good will from his father and removed to the present admirably fitted quarters 78 to 80 Mechanic street. Here Mr. H. G. Lefort, the proprietor and manager, who had thoroughly mastered the business in all its details, turns out an elegant class of thoroughly artistic goods in the line of watch case materials and kindred articles, and controls a large share of the very best trade.

The reader's attention is here called to the beautful half-tone photo-engravings of very striking interior views, which show all that is possible to bring out of the amount of machinery and tools it requires, and the number of people necessary to handle them in the work of making watch case materials and products of a kindred nature.

THE IRVINGTON SMELTING AND REFINING WORKS.

EEP down in mother earth are the vaults of nature where she carries on her alchemistic works with might and main, turning out the beautiful virgin gold, bearing no stamp of a burthensome or detractive alloy and hiding it away in the rock's deep crevice, thus forging a bright link in her great endless binding chain. Not unlike the workshops of men which seek aggregation, hard-by the weaker sister, shimmering silver, is poured from crucibles heat with volcanic fire, to percolate in its most insinuating way, down deep among earth's foundation boulders of granite or gypsum. So hand in hand these precious metals wait, becoming more ductile and immeasurably deep refined till some accidental spark reaches the magazine, where nature has stored her compressed gases and, where explosives are refined, when through eavern's deep and dark roll sounds mightier by far than the deep mouthed thunder, or aught else which can compare with this earthquake or volcanic roar. Seeking a mighty expanse wherein to vent its despairing wrath the foundation rocks are ruthlessly torn, and gathering with mighty sweep the melted fragments and with the output of years, born from broken

crucibles and torn furnaces, the diamond stone, and the precious metals, sending them with one convulsive effort surface ward. Away up and up and on and on through the outlet chimneys and ventive flues, nature sends forth the gold to seek the waters of some babbling brook to cool its burning, by the fire that is not consuming, depositing it

fire that is not consuming, depositing it where men who are seekers may find. The silver too, for a lower state inclined lingers by the way, and forgetful of the influence that was hurrying it on, stops and nestles in crevices of the deep, dark, rocky mine, creeping into "pockets" of granite, where the ferret-like mercury fearless of the granite mills sullen grinding, grapples it in amalgam. Just how the skilled chemist of nature organizes and handles the wee bits, which we call the precious stones, the rarest of which is the diamond, which the wizards among men have decided is naught but pure carbon, we wot not; but this is vouched to us that with a great deal of searching in the far away South American, African or Goncoldian mines men find them. But few in number, and yet fewer are the humans which have

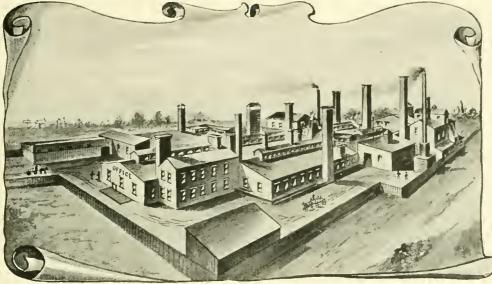
enough of the precious, of the gold or silver to buy them.

That no small share of the wealth of the nations lies hidden in the dust beneath our feet is being demonstrated daily. In this statement, of course, reference is had to one great elementary, or rather foundation article, which has time and again been in the hands of the people and by the force of circumstances, or through manipulations, scientific, or otherwise, returned to the dust from whence it came, in the mediums presented in the old oaken, pine, red wood, spruce, or hemlock floors, quietly and uncomplainingly bearing their burden, but growing rich all the same, as the weight of years grows heavier and heavier by the lapse of time,

and under the tread of many busy feet, forcing its sluning grains close down for keeping company with the lost which may be found again. Where in the manipulations of the precious metals in the manufacture of jewelry, watches, etc., quite a large percentage escapes by accident in various ways and in carelessness of handling, and finds its way into the dust heaps where it is carried with the sweepings, the floors, of course, clinging to its share with great tenacity as now and then a sequel proves. In great jewelry and other establishments where more or less milling is carried on, notwithstanding the great care exercised in sweeping up refuse and floor dust, much often remains in crack and crevice and beneath the innocent looking hemlock sliver. Men of genius for years sought out plans for the recovery of the precious stuff, finally success crowned the efforts and to-day the industry of smelting and refining is a leading one. In the beautiful illustration on this page is presented a photographic view of the great industrial establishment of Glorieux & Woolsey, in which is carried on the business of smelting and refining. These works are situate near the prosperous suburban village of Irvington, and are peerless in elegance of construction and convenience.

This company which is one of the leaders in this branch of industry have their offices at 912 Broad street. The exceedingly

happy results of one of their latest business transactions and successful operations has given them a wonderful business prominence, that largely supplemented their already enviable reputation for perspicuity. honesty and trustfulness among the jewelers and business men of the country. The works of this company being among the largest and



PLANT OF GLORIEUX & WOOLSEY, IRVINTON, N. J.

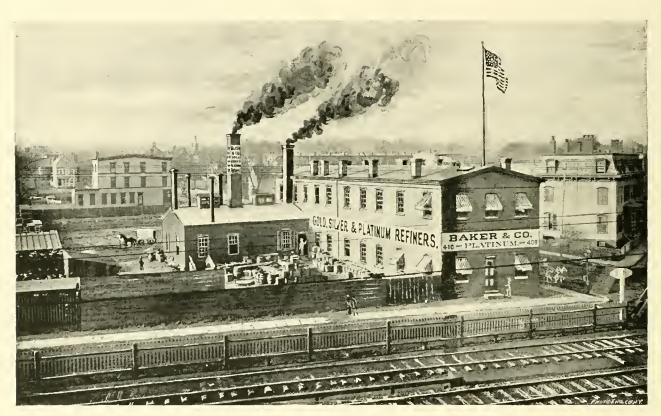
best appointed of any in the United States, giving them facilities which few in the business could control and, having demonstrated a superior excellency of method in the conduct of their business, when the great watch case concern of Robins & Appleton decided to confine their industry to the manufacture of watch movements solely, the contract (which proved a monster one) of tearing down the old buildings in New York city, in which they had carried on the business of watch case making for many years, under the title of the American Waltham Watch Case Company was awarded to them. The whole thing was brought to their factories in Newark, where they burned, smelted and refined the same. The wonderful success which resulted having been the great newspaper theme and talk of the people for months, it was considered worthy of introduction here since they paid to the American Waltham Company, out of the proceeds a nugget of pure gold worth \$66,000, a truly handsome amount of the precious yellow dust to be found hidden away in the wonderful pile of rich debris from an old dilapidated, used up (apparently) worthless. good for nothing, lot of factory buildings. This is only another proof of the fact that these gentlemen have the genuine stamp of the true American spirit. Besides being successful business men and conductors of one of Newark's greatest industries, they have time to take part in public affairs, with credit to their constituency.

THE REFINING OF PLATINUM.

THE city of Newark can claim the distinction of being the only city on this continent where this industry is carried on. Platinum, while not as well known as many other of the metals, occupies a very important position in the arts and sciences; in fact, many chemical operations could not be carried on and many delicate electrical appliances could not be manufactured without it. The increased demand for this metal has probably marked the advance of civilization fully as much as any other metal. The Ural Mountains furnish about 80 per cent. of the crude product of the world. It is shipped direct from the mines to Baker & Company, of this city, who are the only refiners of that product on this continent. The refining process includes not only the

tation, and so on. It is one of the most malleable and probably the most ductile metal known, as it is possible to draw a naked wire down to one thousandth of an inch in diameter. The use to which this wire is put is usually for fuses in dynamite cartridges, and by a little different process of drawing, a wire very much finer can be obtained, known as spiderweb wire, which is used as the cross lines in the theodolite, and also for the meridians in the telescope. Platinum sponge, as is well known, possesses the peculiar property of uniting oxygen and hydrogen gas, and this property has been put to some practical use in the construction of electric cigar lighters, etc.

The space is too limited here, nor is it desirable to enter upon



PLANT OF BAKER & CO., PLATINUM REFINERS, 408-414 N. J. R. R. AVENUE.

separation of the platinum, but also of the iridium, osmium, ruthemium, rhodium, palladium, etc. It may be added that it is always found alloyed with gold and iron. The principal use for iridium is the pointing of gold pens, it being very hard, thereby withstanding abrasion, with little or no perceptible wear. Iridium is also used for alloying platinum, as it renders that metal extremely hard, thus permitting it to be used for purposes that pure platinum could not be used for. Platinum is consumed very largely by incandescent lamp-makers, manufacturing chemists, artificial tooth-makers, laboratories, schools, colleges, etc. 1ts high point of fusion renders it indispensable for various forms of analytical work, and its insolubility makes it of great value to the chemists for concentrating sulphuric acid, and for many other purposes. In fact, without this metal, it would be impossible to make many of the chemical determinations that are now so important to this branch of the science. It is also very useful to the surgeon, as it is very extensively used in electro-surgical operations. It also is used very largely by jewelers for ornamenany lengthy article regarding the chemical and physical properties of this metal. Suffice it to say that it is one of the heaviest, most infusible and indistructable of all metallic substances, and is becoming more and more useful to the scientist and inventor every day. The illustrations herewith given represent the works of Baker & Co., located at Nos. 408, 410, 412 and 414 New Jersey Railroad avenue, of this city, which are not only the oldest established, but as before stated, are the only refiners of crude platinum in this country, but their business is not confined to the refining of platinum alone, as they manufacture the metal into foil, wire crucibles, dishers, stills, retorts, &c., &c., in fact furnish it in all forms for all purposes. They also refine and handle gold, silver, palladium, iridium, osmium, ruthemium, rhodium, and the rare and precious metals generally. The demand for the last-named metals is rapidly increasing as science advances and requires more delicate instruments, for while they resemble each other in many respects, they all possess distinctive qualities, rendering them of great value to the scholar and experimenter.



LOUIS LELONG & BROTHER, REFINERS, HALSEY, MARSHALL AND NEVADA STREETS.

LOUIS LELONG & BRO.

IN TURNING the pages of LLUSTRATED NEWARK, where one after another follow in quick succession the photographic presentations of the beautiful plants of the various industries so successfully carried on within her bounds, which seem fitted by nature as the grand concentration point where they should be carried on we know the examiners and readers must be wonderfully elated, and rise from their sittings satisfied and contented. Not this alone, but he must feel that he has learned some lessons in the history of Newark, New Jersey, on the Passaic river, that he never knew before. If in the presentation of this work to the

world we have done nothing more than bring before them the realization to the full of Newark's real greatness in shadow only, as the beautiful photographic views loom up before them, we shall be content.

Among the thousands which speak in volumes of her praise for the good work already done, we present the industry of smelting and refining as conducted by Lelong & Bro., during the past thirty-five years in the great brick buildings, on Halsey, Marshall and Nevada streets. A very fine idea of the greatness and grandeur of this concern where such a rich, rare and extensive business is carried on under the immediate supervision of Mr. Louis Lelong, his brother Alexander and Mr. Charles J. Degayre can be had by a careful examination of the plates presented here. This firm is extensively and favorably known throughout the United States, Canada, Central America and Mexico.

ROBERTSON & LEBER.

ON THIS page is seen a beautiful half-tone picture of the separating room which is truly representative of the industrial concern carrying on the important business of refining at No. 13 and 15 Franklin street, by Robertson & Leber. The firm began the business of refining, assaying and smelting gold, silver and platinum in 1880, and are thoroughly, well and favorably known throughout the United States and Canada. The members of the firm are young and enterprising men and are representatives of that class who earn success by first gaining a knowledge of their elected business undertaking.



INTERIOR VIEW OF ROBERTSON & LEBER, REFINERS, 36 FRANKLIN STREET.

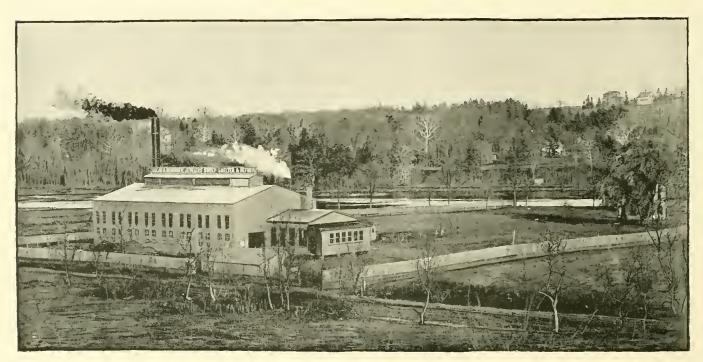
OSCAR A. NENNINGER.

OVERCROWDED has the city of Newark become, with its growing industries in its more central portions, that many very large establishments have erected their plants far out in the suburbs. Such has been the case with the concern of Oscar A. Nenninger, in which is carried on the business of gold and silver refining, sweep smelting, etc.

To procure the necessary ground room whereon to erect the buildings for the housing of his machinery, furnaces, smelting pots, materials, and all the paraphernalia for the conduct of his business, Mr. Nenninger's footsteps turned northward, to the region where the beautiful Passaic is crossed by the New York & Greenwood Lake Railroad, and near where the Second river empties into the stream as it winds its lovely way among the green hills, which grasp its smiling waters in tender embrace as they run rippling on toward the great ocean. The plot lies quite near the river, on Passaic avenue, in the region formerly known

Oscar A. Nenninger, as well as being a thoroughly practical business man, and an adept at the work of wringing success from the grasp of apparently unyielding difficulties, is a man of science, and all along, during the years of his successful conduct of his industry of gold and silver refining, assaying, and smelting high grade gold and silver ores, and jewelers' sweeps, he has opened up a new specialty in nickel refining.

After years of study and patient experiment, he succeeded in the work of refining the utile, rich and beautiful metal known as nickel, which in this age of the world is so largely used in plating and taking the place of silver in many great industries. Just how large a debt of gratitude the world owes Oscar A. Nenninger for his discovery of a cheap and easy method of refining nickel, will never be known, as he cheerfully gave the long days of his labor and toil, and followed the bent of his genius, far away into the small hours of the early morning, so many, many times, as he



REFINING WORKS OF OSCAR A. NEXNINGER, RIVERSIDE AVENUE AND THE PASSAIC RIVER.

as Woodside, but now passes under the name of North Newark. There the huge furnaces of peculiar shape and forth the curling smoke indicative of the burning processes going on below, and burning out every vestige of impurity, converting the refuse into ashes, cinder and smoke, and melting the precious metals down which lie hidden therein. The molten mass, gathering into shining grains of yellow gold, shining nickel and sparkling silver bars as rich and pure as the original ore gathered from far-away Australian or Californian mines.

As well as the smelting, Mr. Nenninger carries on the refining of the precious metals. This is an industry which tends largely to the aggrandizement of Newark, and many of her wide-awake go-ahead men have not only found wealth in its conduct, but pleasure as well, and have succeeded by their marvelous skill and indomitable energy in carrying the business to a high grade of success. Some of the most extensive plants in the city are given over to this business of smelting and refining. The business conducted by Mr. Oscar A. Nenninger, in the commodious buildings, a speaking likeness of which our artist has transferred to these pages from sketches taken on the spot, was founded in 1883, by Mr. Nenninger, and has had a remarkably successful career.

pursued his ideal into the furnace and smelter by way of experiment, without expectation of fee or reward. That he is reaping a rich reward from the addition of this specialty—the refining of nickel—to his old-established industrial pursuits, is a fact that cannot be gainsayed. No one will deny but that it is well deserved.

In all probability there are few industries which give a better return, nor are there many which require an outlay greater in securing it, than that of smelting and refining, and the sister industry of assaying the precious metals, gold, silver and nickel-Although the latter is seldom reached, and more seldom finds a place in the conduct of the manufactures and arts than this city, where such a mighty variety of productions spangle the city over and over with the richest and rarest, and the costliest and cheapest in the long range of productions which are the output of the genius of the greatest number of skilled workmen that have known concentration in any other one given place. The amount of capital is quite fabulous that is necessary to bring these workmen up to the point of output, as the result of a conversion of their study and labor, and the readiness with which those who hold the capital, put it forth, and uncomplainingly accept the resultant profit or loss, is highly commendable.

WM. A SCHENCK & CO.

THE wonderful work of the transformations and transmutations of the precious metals carried on in the industrial concerns of the city of Newark, is a subject of a startling nature to the average casual observer, but when studied in its detail and minutia becomes of the deepest interest to the closest student. First in the amount of the precious stuff handled, in the multitudinous processes carried on, and second in the almost infinitessimal variety, styles, makeups and patterns of the articles of ornament, virtue and necessity, into which they are converted by force of the manipulations through which they pass and the cunningness of the devices which the ingenuity of our mechanics bring to bear on the machinery and machines, which so willingly assist their deft fingers in the almost magical work of their conversion.

In this article we shall only have to do with beautiful silver, the

weaker sister of the beguling gold, which ranks among the richest of nature's outputs from her wonderful crucibles. Althought it is found but seldom near the surface of mother earth, ever so rich in her treasures, but generally away deep down the virgin ore is found nestling close in the loving embrace of its granite foundations awaiting the attack of the miner with drill and blast, and daring hand forcing it into the bucket of ascent to reach the surface, where in the

embrace of the



DESIGN OF WM. A. SCHENCK & CO., SILVERSMITHS, WASHINGTON AND CRAWFORD STREETS.

ruthless crusher it is torn asunder and brought in contact with the insidions mercury and sparkling electro magnetic current, which catches up with nimble fingers the bright grains and hands them over to take their place in the line of march of the industries next to gold. So plentiful is silver when compared with gold, so great a value is not fixed upon it. The comparative cheapness and beauty of silver has had very much to do with its utility, and thus its adaptation follows to a great variety of purposes of ornamentation and usefulness, where the more expensive gold cannot be applied with advantage.

Like many other industries which have their abiding place in Newark workshops, so the manufacturing of useful and almost indispensable articles from silver has grown to such an extent, that Newark now claims to be the main centre for manufacturing silver products.

Prominently among the number engaged in the conversion of virgin silver into articles of commerce, is the enterprising young firm of William A. Schenck & Co., which carries on a silver industry at the north-west corner of Washington and Crawford

streets. This company though young, has already gained an enviable reputation as silversmiths and electro depositors with silver in all of the many later day scientific and artistic processes. The products from the factories of this company stand unrivalled for beauty and excellence of workmanship and finish. The attractive style in which they finish up the novelties among their productions, and the elegant and graceful designs in all their rich and beautiful products has given them a reputation, which places their goods at the top of the silver market. Those in pursuit of articles in silverware novelties, or bric-a-brae in any of its glittering lines have but to leave their orders with this responsible house, the members of which are all Newarkers and men of a high order of ability and of undoubted integrity, giving assurance in full that it will be satisfactorily and quickly filled. With all the

latest modern improved machinery and a large corps of skilled workmen, they are enabled to compete with any house in the trade. They stand ready at all times to make estimates and enter into contracts for solid silver novelties of every description.

As a matter of course it is always in order to make a visit and personal inspection, to get at a satisfactory understanding of what is going on in the workshops, and see all the beautiful things the manufacturers have to show in their

display parlors, but this cannot always be. The next best thing to do is to glance at the truthful representations from the artist's pencil and engravers' skill on this page. Here can be seen most striking likeness of the articles resulting from the industry conducted by the gentlemen above named. Here is seen the beautiful souvernir spoons which this firm turns in a great variety of styles and rich designs, also rare samples of enameling on silver, opaque and transparent. Elegant specimens of enamel filagree, works of art, etc., in great variety of styles and patterns. But a modicum only is here shown of the hundreds of entrancingly, beautiful, artistic and useful articles manufactured by William A. Schenck & Co., silversmiths. From these factories are turned out daily, enough of the rich and beautiful of artistic goods made from silver, shells of tortoise, pearl and ivory, of enamel products and filagree work to startle the novice into exclamations of wonder and delight and create surprise, even in the breasts of the educated in art, those who have tried to believe from long experience that there is naught but old things under the sun, when directly the reverse is made manifest by this firm's products.

THE ALVIN MANUFACTURING CO.

THE above company was organized and incorporated on August 17, 1887, for the manufacture of sterling silver ware and novelties, and is to-day the pioneer establishment in the city of Newark devoted exclusively to the manufacture of sterling silver ware. So rapidly had the business of this company increased it became necessary for them to procure more capacious quarters in which to carry on the industry. Their recently erected large and commodious works, which are shown on the opposite page, are situate near the beautiful suburban village of Irvington. The main building is an immense brick structure, three stories high, 120 feet long by 40 feet wide. The entire building will be occupied by the Alvin Manufacturing Company.

Mr. Wm. II. Jamouneau is the president and secretary of the

the glass surface by the electric current. When this operation is successfully completed the article is shown completely encased in its covering of pure silver. The article is then taken in hand by skillful artists who trace the most intricate designs on the silver surface. The designs are of a continuous character and the intervening spaces are by another process cut away or removed, so as to expose the crystal surface in the interstices of the design. The article is then passed to the engraver, who richly embellishes the remaining surface by engraving suitable designs, such as rich renaisance scrolls, floral effects, and sometimes for special articles, landscape scenes, figures, animals and so forth. When this engraved surface has been highly polished, which is the last and finishing operation, the highly polished tracery of silver contrasting with the clear and brilliant surface of the glass, the effect of which is enhanced by the silver reflections from the inner surface



DESIGN OF ALVIN MANUFACTURING COMPANY, SILVERSMITHS.

company, and Mr. Henry L. Leibe its treasurer. They are both practical mechanics and thoroughly posted in all the technical processes involved in the manufacture of silver ware.

Undoubtedly the most novel and at the same time artistic work turned out by them is that known as electro-deposit goods, a few cuts of which are herewith shown. This most beautiful class of work was invented and brought to a state of great commercial success by this firm. It is impossible in a short descriptive article to do justice to this work. It is applied to decanters perfume and toilet bottles, caraffes, claret pitchers, flasks, perfume atomizers and in fact an almost endless variety of articles of crystal glass. Without attempting a technical description of the process, which by the way is carefully guarded as a trade secret, suffice it is to say, that the article to be silvered which is of crystal glass, is rendered metallic by a coating of silver deposited on

of the glass, is conceded to be the most beautiful that has been produced in the line of silver ware.

Another interesting, useful and important branch of this special process is the coating by silver deposit of handles for umbrellas and canes. Some of the most novel and striking designs that have been produced are shown in the accompanying illustrations. For this work the choicest varieties of imported sticks are selected; among the most popular are the German weichsel or wild cherry, the French oak and medlar, the English hazel and cavada, the Scotch furze and the Irish black thorn.

The selected stick is immersed in the plating bath after being treated chemically to prevent the absorption of the plating solution, and the silver is deposited on the desired portion to the necessary thickness. It is then removed from the bath and carefully polished and oxidized so as to bring out all its natural

characteristics of the wood in the finished silver. The effect thus produced is most unique and highly artistic. Again, varions designs, such as ferns, flowers and other patterns appropriate to the character of the wood, are sometimes etched on the deposited surface and oxidized so as to produce an effect of relief. By this the highest artistic excellence is produced. But while the Alvin Company have always made this work a special and leading feature, they are by no means confined to it, but turn out a very artistic and attractive line of what is technically known as hollow ware, consisting of such articles as tea-sets, fruit dishes, berry bowls, sugar and cream sets, and a general line of flat and fancy wares among which we might enumerate salad sets, pie servers, cream ladles, ice cream knives, meat forks, cheese scoops, carving sets, etc.

at once set their most skillful designers at work to design special patterns of spoons to be sold in the various cities. The most expensive dies were made to strike these designs from, often at a cost of several hundred dollars each, but the results in every case more than justified the original expenditure on the dies. They were noted at once for the striking originality of their designs, and the demand that arose from the trade throughout the country soon proved a severe tax on their facilities for manufacturing the spoons. From time to time the plant was enlarged to meet the requirements, until finally it was found necessary to build the large factory at Irvington, before referred to. Space will not permit of a description of one-tenth of the patterns designed and made in souvenir spoons, but among the best known and most successful we enumerate the "Washington," "Cleopatra,"



NEW PLANT OF THE ALVIN MANUFACTURING COMPANY, SILVERSMITHS, IRVINGTON, N. J.

Several prize trophy cups recently designed and manufactured by them have received very high commendation from experts. A prize loving cup has just been completed, which was presented by the *Sunday Call*, to the winners of three men teams bycicle race at the annual meets of the Riverside Cyclers, held at Waverly.

Perhaps one of the most interesting features in the silver industry during the past decade, is that known as the "souvenir spoon fad." It originated in Europe where for some time it has been the custom for tourists to purchase spoons of various patterns from jewelers, and have the name of the town engraved on them, so as to render them perpetual souvenirs of the place. The Alvin Company were one of the first houses to foresee the demand that would arise for this popular form of souvenir, and

"Miner," "Uncle Sam," "Phoenix," "Columbus World's Fair," "Buffalo," "Historical Cannon," "Wheelman," "Washington Monument," "New York Liberty," "Marguerite," and "Campaign" spoons. These two latter were struck in commemoration of the campaign of 1892, and were very popular as a campaign novelty. The first impression from the dies were sent to the respective candidates, who acknowledged their appreciation by letters, now held by the firm. At the present writing their principal energy is being devoted to designing and making souvenir spoons for the World's Fair Columbian Exposition to be held at Chicago in 1893. Already the demand for these World's Fair souvenirs is very great, and is increasing daily.

The parties conducting this industry are young and as the results prove, full of enterprise.

THE ART OF ENGRAVING.

ERHAPS there is not within the wide domain of industrial activity to-day in the United States any branch of art in which a higher degree of technical skill is displayed, than in the line of business devoted to the engraving of rolls for printing calicoes, satinets, silks, oil cloths and kindred articles, and for embossing textile fabrics, paper, rubber and metals, and may be added also, in few has there been made such notable progress of late years. The advance made in this direction during the

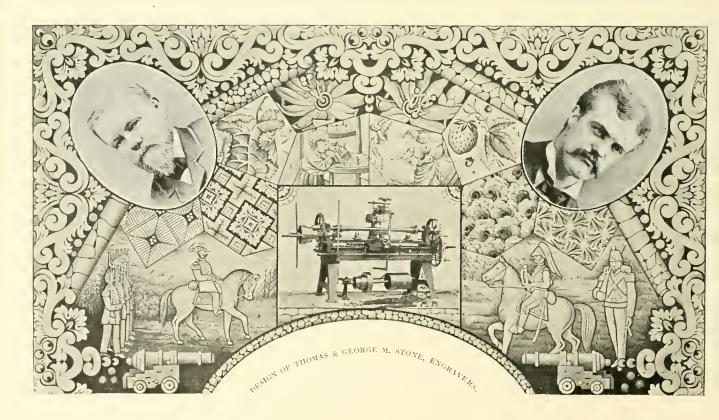
past quarter of a century or so in this country, is of a very marked and gratifying character.

In this connection special mention should be made of the widely known and flourishing firm of engravers, Thomas and George M. Stone, Newark Engraving Works, which enjoys the distinction of being the oldest, leading and best equipped establishment of the kind in the United States, having since the inception of the enterprise thirty-five years ago maintained a record of steady and substantial progress, while its products are in steady and extensive demand, not only throughout the entire Union, but also Mexico, South America and Canada. The premises occupied were built by them in the year 1888, and are supplied with ample steam power and are completely equipped in every respect with the most improved machinery, appliances and appurtenances known to the art, while employment is afforded upwards of forty-five expert workmen, designers, engravers and skilled hands.

The work turned out here is A I in every feature, in design, execution, finish and effectiveness, while the patronage of the

firm is fully commensurate with the capacity of the works, and the name and standing of the concern. After long experimenting they have been successful in putting in a gas hardening or annealing furnace, which is, in every respect, a safer and cleaner process, Messrs. Stone do the greater part of the engraving that is done for the calico, silk, satinet and oil cloth printers throughout the country, for whom they do the fine designing and engraving, which is instrumental in producing the printed goods of various kinds and styles, which are so popular everywhere and the handsomest work of this kind that has ever been seen comes from this establishment. The work on some of the rollers used for embossing cloth, velvet, satin, paper, rubber, zine, brass and other sheet metals is most elaborate in character, and dies of all sorts are made for striking off buttons, bangles and various kinds of jewelry work. Rolls are made from the most diminutive size up to those weighing over a ton. Lately the firm has been doing a great deal in getting up rolls for oil cloth manufacturers, some of the patterns requiring as many as six rolls to complete

Rolls have also been made which enable leather manufacturers to imitate alligator and seal skins that any one but an expert would pronounce them to be the genuine skin. The satisfactory result from these rolls was obtained only after years of experimenting, as it was a very difficult matter to get an exact seal impression. The firm is now able to produce an imitation of any seal skin desired. It is also at these works that the rolls are made which are used in printing or embossing the celebrated Linerusta-Walton, which is used so much for decorating the interiors of our fine buildings, state rooms of steamships, parlor



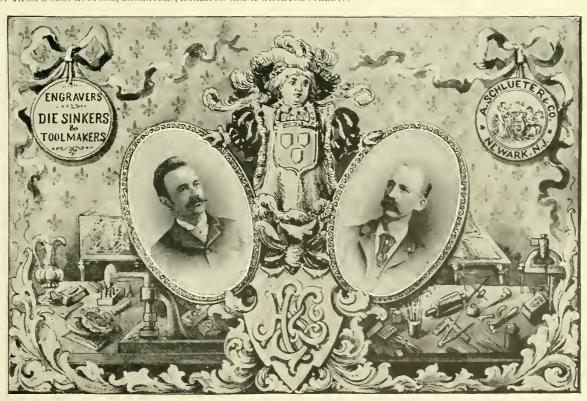


WORKS OF THOS. & GEO. M. STONE, ENGRAVERS, HAMILTON AND M'WHORTER STREETS.

cars, etc. The largest rolls ever made as well as the finest have been produced by the Messrs. Stone. It would be hard to enumerate the many purposes for which they have made rolls at different times.

A. SCHLUETER & CO.

THE man who has the patience, and is endowed with a mind succeptible to such impressions as will fit it by education to guide the arms, hands and fingers, into the skillful ways for the manufacture of medallion heads, portraits, figures and all kinds of dies and tools for jewelers and fancy brass work, celluloid and hard rubber dies, embossing dies for stationers, steel stamps, seal presses, hat tip dies, &c., is an artist indeed, and a child of genius, and such an one is Albert Schlueter, and as is his partner Henry Loeffler. The business now conducted so skillfully by the wizard-like Schlneter, was started in 1881 by Mr. H. Fiedler, who carried it on till 1886, when Mr. Schlueter took hold, and Mr. Loeffler two years later. Albert Schlueter is in love with his art, and per consequence the work turned out from the establishment of A. Schlueter & Co. is all of a very high character, and is in demand everywhere that first-class goods find a market. This company keep a number of skilled artists at work in the commodious and well-arranged establishment, as shown on this page, by an engraving made from a sketch from the pencil of our artist, which is located at 363 Market street, near the P. R. R. Depot. They make a specialty of medallion heads, portraits, figures and all kinds of die sinking and jewelers' tools as well. An order left with Albert Schlneter & Co. will always be a welcome guest, and its filling will be but the occupation of the time between now and immediately.



DESIGN OF A. SCHLUETER & CO., ENGRAVERS, MARKET STREET AND RAILROAD PLACE



JOSEPH POWELL, ENAMELER.

JOSEPH POWELL.

A MONG the jewelry industries carried on in this city, the art of enameling forms a most important part in the decoration of jewelry and watch cases. Prominently engaged in this art stands Mr. Joseph Powell, whose portrait is herewith given. This gentleman conducts the business of enameling at No. 12 Green street, where he devotes his entire attention to the beautiful art of decorating and painting in enamel on every description of article in solid silver and silverware in plain and fancy colors.

HENRY M. LITTLE.

MONG the numerous industries carried on in a great manu-A facturing city like Newark, there are to be found thousands of expert mechanics upon whose skill and experience many of them in a greater or less degree depend. There are perhaps but few engaged in the profession of consulting mechanical engineering and draughting, who have won a higher reputation for all round expert work than Mr. Henry M. Little, whose portrait forms one of the illustrations herewith given. This enterprising citizen and mechanic is well and favorably known in Newark, ne having been identified with the silk factory on Bank street for a number of years. He is now a resident of Wabash, Indiana. That growing Western city is a fine field in which Mr. Little will find a wide range for the exercise of his versatile engineering talents. Like many another Newarker who has gone forth to other fields, we opine that the same success which so eminently marked his career in the practice of his profession here, will follow him there. He was long a familiar figure about the silk works on Bank street, and he has left not a few monuments of his engineering skill, and his business tact and energy as well, in the great brick building known as the Newark City Silk Mills. For many years Mr. Little had the entire control and management of the same.



H. BUCHLEIN, ENGRAVER.

H. BUCHLEIN.

THE designing and manufacturing of seals for societies, corporations and notary publics, the designing, engraving and die sinking for jewelers, and ornamental brass work, also for leather and paper embossing is one of the numerous industries for which the city is noted. Mr. H. Buchlein, whose portrait illustrates this page, engaged in the business twenty years ago, and from his workshop have come some of the finest specimens of badges, and society insignia, known to the trade. His factory is located on the third floor of 787 Broad street. He is a practical mechanic in the manufacturing of marvels in this line, prompt and reliable in all his business relations and deserves the success with which he has met.



HENRY M. LITTLE, DRAUGHTSMAN.

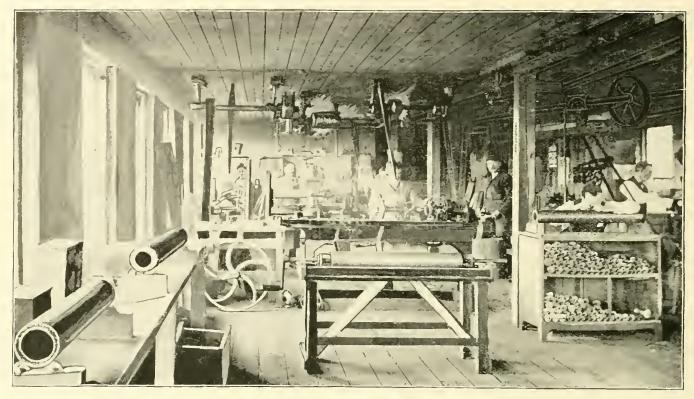


TABLE CLOTH DESIGN BY A. K. CRAIG, ENGRAVER, RAILROAD AVENUE AND EAST FAIR STREET.



BRADLEY & CRAIG.

THIS firm was organized in 1883, and is composed of Messrs. Daniel Bradley and Andrew K. Craig. each of whom are practical mechanics in the engravers art, and were among the first to produce successfully, colored patterns for oil cloth printing, on which they retain a monopoly, due perhaps, to their superior workmanship, and have produced the largest engraved rolls now in use. The engraving of rolls for embossing sheet metal, paper, leather, etc., forms a large part of their trade, throughout the United States, Canada and Europe. Rolls for printing silk, plush, calico, satinet, wall papers, etc., make up the balance of their out put. Many of the best acknowledged patterns have been engraved by this firm. The machinery used is first-class, and the works are equipped with every improvement known to the trade, and none but the best expert workmen are employed. In the illustrations herewith given is a beautiful engraved table cloth and photos of the young and enterprising proprietors.



INTERIOR VIEW OF THE ESSEX ENGRAVING WORKS, NO. 125 AND 127 N J. R. R. AVENUE.

VOGEL & KUBLER.

THE engraving industry as carried on in the city of Newark has in all probability at the hands of no individual or company, a fairer exposition than from these of Vogel & Kubler, who do a large business as engravers to oil cloth, calico, paper and satinet printers, also rollers for the embossing of plush paper, rubber, leather and all sheet metals, under the firm name or title of the Essex Engraving Works, located at 125 and 127 New Jersey Railroad avenue, between Green and Elm streets.



ALOYS VOGEL,

This engraving business was established in 1888, by the head of the present firm, Mr. A. Vogel and Mr. Albert J. Kubler. The truly marvelous success which has followed the career of this firm is only another demonstration of the well-known fact, which long ago passed into the field of adage, "That honesty is the best policy." From the very beginning the firm prospered, and now the industry which bad a very modest beginning, has its plant housed in the extensive and imposing buildings, of which a faithful representation of the interior is presented on this page, through the instrumentality of our artist's pencil, who so faithfully photographed them, and the engraver who fashioned the plates for this beautiful picture.

Few industries among the thousands which have their homes in this busy city on the Passaic, have had such smooth sailing as this one over which Mr. A. Vogel presides. A stranger may be pardoned for asking, why is this? When the answer would come up in ready response. Mr. Vogel is an artist himself and knows all about the business, and it is quite natural to believe that he knows just what he is about all the while, and can see quite

readily how to avoid the rocks upon which the business might strand were not the helm of the good ship in such wise, quick and clear discerning hands?

Whenever the rollers they manufacture are requred, the firm is already so well and favorably known and the goods which are the output of their industry have been so well tested, they find a ready sale at very remunerative rates. The dimension of the buildings are 40 by 75 feet.



ALBERT J. KUBLER.

NEWARK RIVET WORKS.

NOTHING leads to a greater degree of surprise and wonder to the investigator of the extent and variety of the industries carried on in this great manufacturing centre, than that of rivet making. This industry occupies a most important place in the aggregation, it acting as feeder to many other things. No manufacturing establishment where iron-hooped barrels, casks, etc., are turned out, and no steam boiler works can well be run without the aid of the inseperable and indispensable rivet.

out by the millions, is an industry which was established in 1874, and is located on Monroe street, covering the large plot of ground extending from No. 138 to 146. The business offices of the company are at No. 146. Mr. W. F. Harris is president, and W. W. Trimpi secretary and treasurer, the company being incorporated. Probably no manufacturing establishment in the city has a plant selected with greater care, and their machines, tools, lathes, furnaces, etc., many of the former being automatic,



NEWARK RIVET WORKS, MONROE STREET.

Many an establishment which carries a high head, would be brought low were the supporters of the rivet withdrawn. To little purpose would boiler-makers turn the great sheets of rolled metal into cylinder shapes, or drill the holes, small and great, along the borders, without the ready rivet to hold the first in shape, and fill the latter in carrying out their purpose to build a boiler.

Few industries, indeed, carried on in Newark come into greater prominence or demonstrates more clearly the great fact of the dependence upon one another, or upon each other to a greater or less degree, than this of rivet making.

From the institution, photographic views of which are seen on this page, rivets of every style, make and description, are turned being of the very best for the purposes for which they are designed and used.

Besides the millions of rivets made of iron, copper and brass, and the celebrated Norway iron rivets, black, coppered and tinned, which this company are daily turning out, they also manufacture large lines of sheet metal goods, escutcheon pins, pipe umbrella ferules, baby carriage hubs, bolts, etc. Their goods as well as finding a ready sale at home, where much of their output is consumed, find anxious buyers and satisfied consumers in all the large cities of this country.

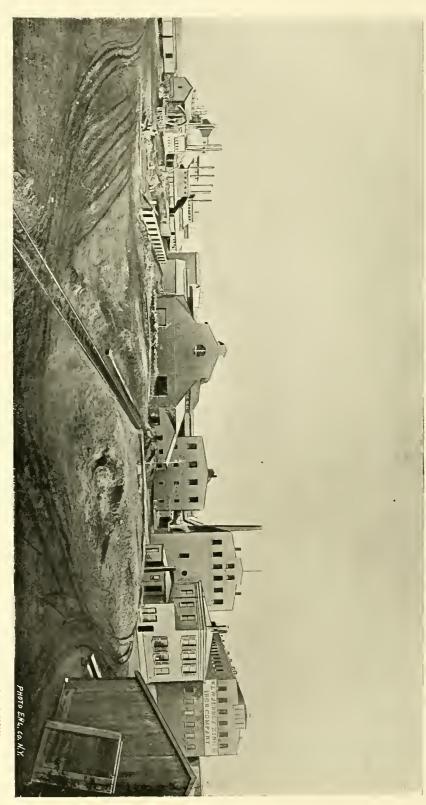
A large number of mechanics and laborers are given constant employment in the conduct of this useful branch of the manifold industries carried on ln Newark.

NEW JERSEY ZINC AND IRON COMPANY.

A MONG the thousands of industrial establishments in the city of Newark, the one that is peerless stands on the plot, or rather covers, the broad acres lying on Chapel street and Passaic avenue, the Morris Canal and the Passaic River, and is known as the New Jersey Zinc and Iron Company. On the territory bounded as above, this company (recognized as the oldest in the city), has erected a plant of exceedingly great value, consisting of more

than a score of great brick structures with their mighty draft chimneys reaching heavenward. Smoke stacks huge and tall, gives to the beholder as he looks at its pillars of smoke ever curling upward from furnaces whose fires burn night and day and seldom go out, and when night shuts down the glow of the burning gas at the chimney tops sending a furid glare over and around the city, an appearance of weirdness that is truly startling. Gray with age many of the buildings are, and the walls are covered with soot and dust. As a visitor enters the great gates, thrown wide open for his reception, the rattle and bang of business turmoil smites his ear and the smell of the burning that seldom knows quenching, salutes his olfactorys. On all sides are seen huge piles of virgin ore from the mines, and heaps of coal towering like young mountains each awaiting its turn, later to be consumed in the furnaces furnishing the heat for melting and smelting, the other to be east into the cupolas or smelting pot. An army of workmen stripped to the buff, flit like spectres to and fro before him, bent to the work at wheeling the laden barrow, or bearing the heavy burden, their muscles standing out like huge knots on arms, breast and shoulder, the dust mingling with sweat, bursting from every wide open pore, giving their faces, bronzed with health and exposure a semi-sayage look, which belies the good-natured and happy hearts palpitating in many bosoms or streaking their faces with the grime made ghastly by the strange outer covering.

Night and day these works are run by two gangs of managers, overseers and laborers. When the bell taps or whistles blow one set or gang departs for rest, sleep and refreshment, while another takes their place, and thus it is that the fires are kept burning, the melting and smelting never ceasing except on Sabbath day. The ore for reduction is brought by canal, river and rail from their own mines in Sussex county. and is converted into oxide of zinc and spelter, articles of great utility and necessity in the world's operations, and is everywhere in demand and finds a ready sale in the markets. The company turns out a high grade iron called spregelersen, a greatly prized article of commerce, which is possessed of such excellent qualities and is such a high grade of purity as to be in great demand for its marvelons utility. That the reader may gain a better understanding of the extent of territory occupied for the housing of the plant of the company and extensive character of the works, the artist has here presented views which give a representation which is indeed a speaking likeness and worthy of a careful study, but while it detracts nothing from the wonderful skill displayed by the artist in their transference to these pages, to say that the works of the New Jersey Zinz and Iron Company must be seen on the spot, like the Falls of Niagara, to be appreciated, the plant of the company growing in greatness while you gaze, while the falls grow in grandeur as you linger and contemplate. More than 400 skilled workmen and laborers are given constant employment, while there is an output annually of several millions of value of zinc and iron productions. Mr. William Hardenbergh superintends all the operations of the company, and is indeed the right man in the right place.





MACHINERY PLANT OF CYRUS CURRIER & SONS, RAILROAD PLACE, COMMERCE AND MARKET STREETS,

CYRUS CURRIER & SONS.

THE illustrations herewith given represent one of the oldest, and perhaps most useful, industry successfully conducted for upwards of half a century by Messrs. Cyrus Currier & Sons, machinists and founders. The business was established at the present site by the honored father of the present proprietors, in March, 1842. Its founder, whose photo is



CYRUS CURRIER, FOUNDER.

given below, came of New England Revolutionary stock, on both the maternal and paternal sides. His grandfather, Nathaniel Currier, held a commission as major under King George the III, and upon the commencement of revolutionary troubles east his influence with the patriots, and in 1773 was elected by his fellow townsmen of Salisburg, Mass., to represent them in the Congress at Watertown. He enlisted in the Continental army and was made a captain, Morris Currier, the father of the subject of this sketch, was identified with a number of useful industries, such as nail, chain and anchor forges, and sawmills, and was a pioneer in the manufacture of woolen goods. Before engaging in business for himself, Mr. Cyrus Currier was associated with the now illustrious Seth Boyden, and performed a large share of the mechanical work on the locomotives Orange and Essex for the Morris and Essex Railroad. These engines revolutionized the construction of locomotives. He also had charge of the first steam fire engine stationed in New York. This engine not only had steam pumps, but was propelled by steam. In 1849 he took the Overland Route to California, and among many other other incidents of the trip, he traded a mule team with Brigham Young on the Rocky Mountains, and he built the first sawmill that was put up in the California Red Woods, United States Senator Leland Stanford's stock farm is now watered by the brook which supplied water for the boiler. What was at that time a wilderness of immense red wood trees is now occupied by fruit farms.

During the more than fifty years since the business was established, there have been several partners, and for many years previous to the admission of his sons as partners, he conducted the business alone. The policy of the concern has ever been to conduct a general business in the line of machinery and eastings, and at the same time to manufacture several specialties, which constituted a backbone to rely on. At one time this shop produced nearly all the machinery used in the manufacture of hats, and they made jewelers' machinery a specialty for several years. Paper-making machinery has always been a specialty of the firm, and in this line they own and control several valuable patents. They have given particular attention to some branches of the leather business, and have made radical changes in the machinery for the manufacture of enamel cloths. A great amount of experimental work has been done in their factory, and many inventions have been made useful by them which otherwise would have been of no value.



INTERIOR VIEW OF HERBERT W. CHAPMAN'S MACHINE WORKS, MULBERRY STREET.



HERBERT W. CHAPMAN.

HERBERT W. CHAPMAN,

BUILDER of bank note engravers' machinery, engraving machines for calico and satinet printers, patent foot presses for jewelers or sheet metal workers, high speed simple, compound and triple expansion engines for steam yachts and launches, etc.

This business was established in 1872, for the manufacture of jewelers' tools and special machinery for the manufacture of novelties, etc. In the year 1877, the line of machinery for bank note and other engravers was introduced, and is still continued as one of the principal manufactures. The building of fine compound and triple expansion engines for marine purposes is another addition to the regular line of machinery built by this house.

In this connection the reader will be interested in glancing at the beautiful photo illustrations, which have been so successfully transferred to these pages, in which the artist, with the true magic of his art has given such an excellent idea of the extent, and somewhat of the intricacy of the machinery and tools necessary to be employed in turning out the various lines of machinery built at this establishment.

These works are located at Nos. 227, 229 and 231 Mulberry street.

GOULD & EBERHARDT.

THE extensive works of Gould & Eberhardt on New Jersey R. R. avenue are the outgrowth of an industry founded more than half a century ago by Mr. Gould, the senior member of the present firm. The founder of this most important industry and one of Newark's most honored and highly respected citizens is a native of Paterson, N. J., and a skilled mechanic of more than ordinary ability, who started in Newark with one of the first steam engines, brought into the eity, on the Rankin property near the old pond, at High and Market streets, and although he has passed the allotted term of four score years, he is still in good health and enjoys the result of well-earned prosperity.

Established in 1833, in a room 16 x 16 feet in dimensions, what was then known as the Hedenberg works, from this small beginning has grown the present extensive business, with a trade extending to all parts of the civilized world.

The active management of the entire concern for the past twenty years or more has devolved upon his partner, Mr. Ulrich Eberhardt, a native of Switzerland, who served his apprenticeship with Mr. Gould, and has been identified with the works as apprentice, foreman and partner for about thirty-five years, and who is now owner of the works.

The premises occupied have a frontage on New Jersey Railroad avenue, extending from No. 95 to 111, inclusive, upon which is erected a commodious four story building 35 x 150 in dimensions,



GOULD & EBERHARDT, 95 TO 111 NEW JERSEY RAILROAD AVENUE.

with an annex 51×35 feet, a foundry building 50×60 feet, and a pattern storage 40×50 feet, having a frontage on New Jersey Railroad avenue, Green street and Bruen street.

The leading products of this extensive establishment comprise fine grades of first-class, entirely automatic machinists' tools, special machinery and general machine work of the most a lyanced ideas of construction, lathes, planers, slotters, Eberhardt's patent gear cutters (which have created a new field with manufacturers all over the world) the latter machine being used universally for cutting the electric car motor gears. Milling

machines, power, drop and lever presses, steel plate printing presses, which do the work more perfectly than hand work, some twenty-five of these being in use by the United States Government at the Bureau of Engraving and Printing Washington, D. C., also by the Canada Bank Note Co., and other governments. Also build bank note engravers transfer presses and calico printers' engravers' lathes.

OSCAR BARNETT.

THE illustration herewith given represents Oscar Barnett's malleable and grey iron works, located on Hamilton, McWhorter and Bruen streets. The business was established in 1845, by Stephen D. Barnett, father of the present proprietor. The principal market for the goods manufactured extends over the United States and Canada, while some are exported to England and South America.



OSCAR BARNETT, HAMILTON, MCWHORTFR AND BRUEN STREETS.



RICHARDSON SAW WORKS, RIVER STREET

RICHARDSON BROTHERS

O WHERE he will, the reader meets with saws made in Newark and bearing the well-known and popular stamp of the Richardsons.

These great saw works began their career under the guidance of the men whose honored name they bear, by filing and repairing the saws of other manufacturers, not being able at that early day to control capital enough to manufacture, themselves. It was not long before their tact, diligence and experience began to tell, and the extent and scope of their works began extending under the influence of capital, which had accepted this field for investment. The mechanical skill, honesty and integrity of the Richardsons turned out such a high grade of saws that the product needs but bear their trademark to find a ready sale.

The capital now used by the company, which was incorporated in 1890, aggregates the enormous sum of \$400,000, held by thirty-three stockholders, employing 200 skilled workmen, who turn out yearly thousands of the finest saws ever made. Hon, George A. Halsey is president; S. S. Battin, vice-president; Hamilton Diston, treasurer, and F. B. Earle, secretary. The tone and solidity of the great concern is readily seen in the honored names of its officers. The beautiful photograph here seen gives a striking view of the great buildings in which the company's saw-making plant is concentrated and housed; but how little can be realized

of the extent of the mighty industry carried on within, in manufacturing from the finest plates of the very best steel saws of a great variety of forms, shapes and sizes, to be used for all mauner of work where this "tool of genius" the separating saw, is required by the tens of thousands of operatives all over the country. To get a full understandof the grandeur of this saw making insttution one must make a visit of inspection through it.

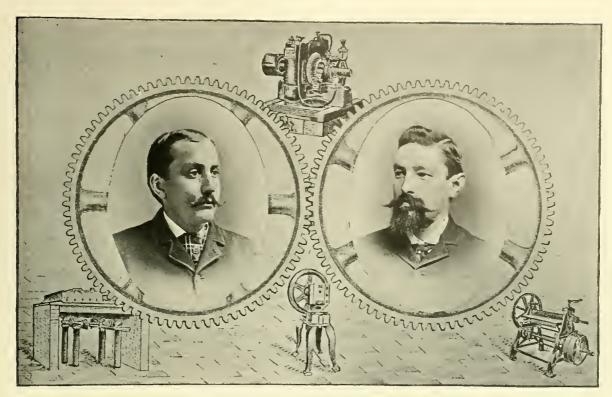
R. HEINISCH'S SONS CO.

As EARLY in the century as 1825, Robert Heinisch began the industry of making scissors in the city of Newark. A thorough knowledge of his business, and a settled determination that no policy of his should control Robert Heinisch but the one founded on the old adage that "honesty is the best policy," this course soon found the road to success and competency by the way of honest goods of high grade. The fine temper of the goods turned out by Mr. Heinisch soon gave them a reputation which created a demand that needed a more extensive plant for manufacturing so as to meet it. Orders from all over the country, where the Heinisch shears for tailors, seamstresses and clerks were used, came pouring in. In 1892 the sous became the success-

ors, and a little later they were organized into a company under the New Jersey State Laws, with R. Heinisch, president; R. E. Heinisch, secretary, and D. W. Van-Tine, Treasurer. A beautiful photo illustration of their works appears on this page.



R. HEINISCH'S SONS CO., BRUCE STREET, CORNER THIRTEENTH AVENUE.

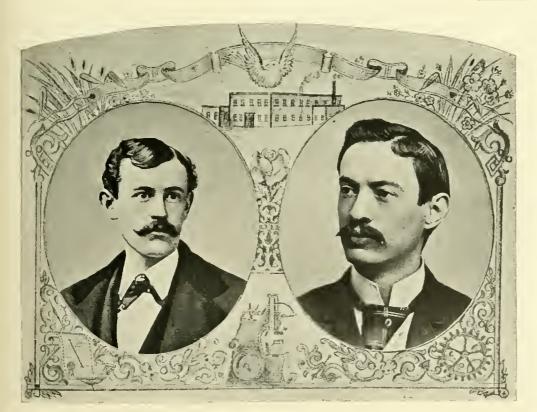


DESIGN OF OHL & HAEFNER

OHL & HAEFNER.

THE above cut represents the founders of the firm of Ohl & Haefner, who, engaged in the manufacture of machinery at Nos. 9 and 15 Alling street, Newark, N. J., by conducting their business on strictly honest and business principles, have built up a trade second to none in their line in this town. This firm attributes its success mainly to the fact that they refrained

from making a specialty of any one or other kind of machinery. Although they hold several valuable patents of their own, they are at all times ready to manufacture or improve the inventions of others. Besides this they do a large jobbing business, always having first-class help to do their work, which varies from the most delicate dies and tools, to presses, engines and a large variety of ordinary and special machinery of the heaviest and most approved type.



DESIGN OF F. J. SCHMITT & CO.

F. J. SCHMITT & Co.

HIS firm, although established only about two years ago, is at present conducted by Frank J. Schmitt and Gus. A. Kruttschnitt, and in this short time they have enjoyed a large and growing patronage from all the leading jewelry houses in Newark and vicinity. They have added new lines of manufacture to the large variety of jewelers' and silversmiths' machinery, which they now make. They are the sole manufacturers of the Vaughn Patent Power Hammer used largely for forging purposes. One of the latest branches they have added to this line is the manufacture of pearl button machinery in every variety. Their business is increasing very rapidly, and in the fall of 1891 they were forced to add a new addition to their factory in order to be able to fill orders more promptly, and the indications are they will soon have to add more room.



ENGINE WORKS OF JOSEPH S, MUNDY, PROSPECT STREET

JOSEPH S. MUNDY.

JOSEPH S, MUNDY, mechanical engineer and manufacturer of hoisting engines, Prospect street, Newark, N. J., was born in Rahway, in April, 1847. His father, Henry E., was born 1816 and died 1878, and married Frances Crowell, by whom he had eight children, seven boys and one girl. His great grandfather was a soldier in the Federal army during the revolutionary war, and was engaged in the famous charge



JOSEPH S. MUNDY,

from the Cedar Grove swamp between Perth Amboy and Rahway against the Tories. His grandfather, Henry, was a carriage mannfacturer, and was one of the first promoters of the New Jersey Railroad and Transportation Co., now part of the grand trunk line of the Pennsylvania railroad. Joseph S. Mundy received his education in a district country school during the winter months, working on his father's farm during the balance of the year, untill 1866, when his father removed to Newark, where Joseph S., went to work to learn the stone cutter's trade. His mind leaned toward mechanics and not being contented with the trade he started to learn, he shortly after apprenticed himself, in August 1866, with Dutton & Wilson, machinists, at \$3.00 per week; where showing so much interest for his employers, that before the year had elapsed he was advanced to \$7.50 per week. In the spring of 1868 this firm dissolved, and he engaged with the Hick's Engine Co., as journeyman. In the winter of 1869, he left the Hick's Engine Co., and engaged with Messrs. 11orton & Kent, successors to Messrs. Dutton & Wilson his former employers. Shortly after this, Horton bought out Kent's interest in the business, when Joseph S., went into partnership with Horton, on borrowed capital, the firm being Horton & Mundy, and in the Fall of 1870, he bought out the entire business, his father furnishing the money. During this time he studied hard, also doing the work of three men, working from seven in the morning until ten at night, in order to make a success of his husiness. In 1871 he began to make sketches and plans of a friction drum hoisting engine. Not having any money to complete his invention with, until 1873, when he made his first complete machine, altering and changing the entire mechanism three times, after which it proved to be the most complete and best known device for pile driving and hoisting every produced, and was therefore patented by him in 1875. Thousands of his engines have been supplied to bridge builders, railroad contractors, railroad companies, dock builders, quarries and mining companies.

His works now cover nearly two acres of ground, with all the latest improved class of machinery, with an area of 150,240 square feet of working room.

Joseph S. married Mary E. Hallenbeck, daughter of William H. Hallenbeck, of Hudson, N. Y., in 1873, by whom he has had one son born to him. He is a Knight Templar, Mason, also a member of the Imperial Ancient Arabic Order of the Mystic Shrine, Mecca Temple, New York. In the winter of 1868 he joined the Second Reformed Church, of Newark, and has always been an ardent church worker.

EDMUND JOST.

THE illustrations on this page represent the works of Edmund lost, machinist, brees found Jost, machinist, brass founder and finisher, located at Nos. 350 and 352 Plane street, between William and Market streets. The business was established in 1870, by the present proprietor, who is a practical mechanic, with considerable experience in the art of constructing philosophical, mathematical and optical instruments. The works are equipped with every improvement for the manufacturing of special machinery and brass work required in the construction of experimental and patented novelties, for steam, water, gas, oil, chemical, electrical, and every description of interchangeable products. Electricity is the motive power employed in running the wonderful lathes, drilling, shaping, planing and turning machines screw cutting and milling tools, etc. Employment is found for upwards of fifty skilled mechanics, who are constantly engaged in supplying the steadily increasing demands of the trade. The brass foundry, located in the rear of the main factory, is capable of producing all kinds of brass and composition castings, and is a model in itself. The products are principally noted for superior workmanship and adaptation to the purposes for which they are designed, and are largely consumed by the trade throughout the principal cities of the United States

Mr. Edmund Jost is well known, and has the confidence of the various trade representatives, and is esteemed as an enterprising and successful manufacturer and an upright citizen, whose business has been made successful by the close personal attention given to the intricate work intrusted to his care.



EDMUND JOST.



EXTERIOR AND INTERIOR VIEWS OF EDMUND JOST'S MACHINE SHOP AND FOUNDRY, PLANE STREET.

H. T. CLAWSON.

THE inventor is to the mechanic art what the poet is to literature; each in his way presents the sublimity of thought.

The illustrations given on this and the opposite page truthfully represent an industry which has in a large degree contributed to make the city of Newark celebrated all over the world. In reviewing the numerous interests of the city, the inventor proves an important feature, for it is to his skill and brains that the genius of a country is most clearly exhibited, especially from a practical point of view.

In this connection, the house of H. T. Clawson and C. C. Clawson, inventors and manufacturers of automatic package filling machines and slot machines, is worthy of mention. The works are located at No. 21 Hackett street, adjoining the famous Hedenberg Works. Mr. C. C. Clawson's famous package filling machine is one of the great labor-saving machines of the age. With them he can accurately weigh and put in packages any material, such as rice, coffee,

starch, shot and the like, forty packages per minute, which are carried off upon an endless belt. He makes twenty-four different kinds, adapted to various articles.

He is also the inventor of the musical weighing machine, a machine which weighs a person accurately, prints the exact weight upon a card with the date, deposits the printed card upon a small table to receive the same, and at the same time plays a beautiful tune; the scale and all the apparatus connected with it are set in motion by dropping a "nickel" in the slot. It is a very ingenious piece of workmanship. From this invention and from his automatic fortune-telling machine, which is also opera-



WORKS OF H. T. CLAWSON, HACKETT STREET.

ted by dropping a "nickel" in the slot, have sprung the swarm of small imitators. The soothsayers of the past would turn green with envy if they could know that a fortune could be told by dropping a "nickel" in the slot.

H. T. Clawson and C. C. Clawson, father and son, in them are united business shrewdness and inventive genius. Their names have reached every city in the United States and are becoming familiar in foreign countries. Mr. C. C. Clawson is president of the Clawson Slot Machine Company, a corporation which has become successful in handling slot machines invented by its president.



H. T. CLAWSON, MANUFACTURER.



C. C CLAWSON, INVENTOR.

INTERIOR VIEWS OF H. T. CLAWSON'S FACTORY.



PAINTING DEPARTMENT.



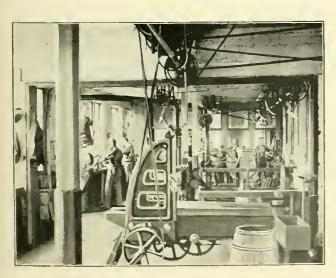
ADJUSTING ROOM.



TESTING DEPARTMENT.



PRINTING DEPARTMENT.



MACHINERY DEPARTMENT.



SCALE DEPARTMENT.



FREDRICK FINTER.

FREDERICK FINTER.

IN THE unpretentious frame structure at the corner of Thomas and Goble streets, with main entrance at 176 Thomas street, is conducted an industry which has given to the now aged Frederick Finter both fame and competence. Although the genial proprietor, whose excellent photo likeness is seen alongside the home of his industry, is silvered with age, he wears his years as though the burthen was light, and continues to give his personal attention to his business of manufacturing Britannia ware just as he did thirty-five years ago.



JOSEPH E. TRIPPE.



WORKS OF FREDRICK FINTER, CORNER THOMAS AND GOBLE STREETS,

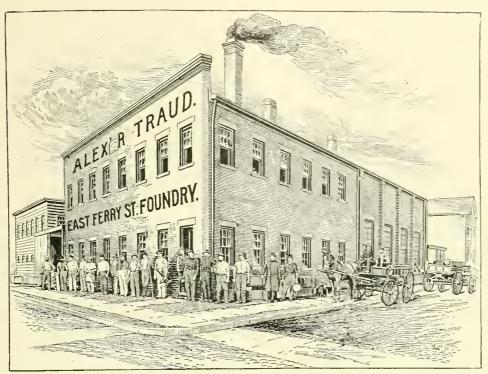
He early learned what has taken many good men a life time to learn and that was, that the man who devotes his talents and gives his entire attention to one pursuit, meets a surer success and better return. His chosen industry was that of manufacturing Britannia ware of the higher grades in a great variety of styles and patterns for a multitude of purposes, and fine glass trimmings, and has made one branch of it a specialty, viz: druggists, chemists and glass manufacturers' ware of every style, pattern and make in use anywhere.

TRIPPE & UTTER.

THE immense quantities of acids, chemicals, dye stuffs, machinery oil and manufacturers supplies, which the firm of Trippe & Utter handle at their stores at the corner of West Kinney and Beecher streets, would be indeed surprising if it was not that the close association of such surprising mercantile interests did not appear to overcome their greatness with a close familiarity.



J. NORRIS UTTER.



IRON FOUNDRY AND MACHINE WORKS OF ALEXANDER TRAUD, EAST FERRY, MAIN AND ST. FRANCIS STREETS.

ALEXANDER TRAUD.

THE industry conducted with so much success by Mr. A. Traud at the junction of Ferry, Main and St. Francis streets, justly takes rank among the most prosperous in the city of Newark. A glance at the buildings in which his multiple industry of machinery building, iron founding, pattern making, drawing, etc., will satisfy the most exacting, that the proprietor is not only a great mechanic, but a successful business man as well. Not content with all these various lines represented at his factorys, he has just completed extensive arrangements for carry-

ing on the business of hag frame manufacturing on Main street adjoining his foundry and machine shops. While engaged in turning out finished machinery of almost every description and filling orders for castings, models and preparing drawings, his ever fertile mind is working out some new idea and forging plans by which to not alone puts ducats in Alexander Traud's purse, but help his brother manufacturers in the conduct of their business by the transference of surplusage of his skill and genius to their work shops. Like hundreds of other men of push and enterprise, Alexander Traud early discovered the fact that Newark had more and better facilities for the successful conduct of indus-

trial pursuits than any other city in the land. Among its advantages for the conduct of his business was easy of access, close to the hest markets of the world, to buy and sell in, to procure the raw material and market the finished product, with railroads, river and canal, to give cheap freightage and rapid and safe cartage, the best of mountain spring water, capital at hand to borrow from liberal men and banks for deposit and credit and plenty of mechanics, artists and skilled laborers ready at call. So painstaking and careful have the manufacturers of the class to which Alexander Traud belongs, been, in establishing and maintaining an excellent name and keeping untarnished the well-earned fame of Newark-made goods that wherever the output from its factories go, they meet a ready demand and sell quickly. Aggregation has been the watch word, and thus it is that the industries go hand in hand and the will being of one class, means the success of all.

The business was established in 1876 and at once took a high stand among the sister industries, with an extensive plant, excellent machinery and a large corps of mechanics and artists, success has crowned his efforts, and now with the addition of the new bag frame industry a wider field is opened up and the promise made of a more abandant prosperity.



BAG AND SATCHEL FRAME PLANT OF ALEXANDER TRAUD, 28 TO 34 MAIN STREET.

D. S. PLUMB.

THIS business was started in 1881 by Messrs, George E. Hart and D. S. Plumb, under the firm name of Hart & Plumb, the intention of the projectors being the manufacture of the finer grades of clocks in competition with goods of the best foreign makers.

The first articles produced by the firm were small carriage, or hand traveling-clocks with movements enclosed in glass cases having solid metal corners, tops and bases in gold finish, and with the regular outside leather case. These clocks were pronounced equal to the foreign made, and met the demands of dealers in this line, but it was soon found that outside of New York, and one or two of the larger cities of the country, the demand of the finer grades of clocks, in any style, was much less than the manufacturers had been led to believe, and this, together with the fact that foreign manufacturers made considerable reductions in prices as soon as they learned of a successful attempt having been

made in this country to produce the goods, led the firm to make this work secondary to orders for clock work specialties, which from time to time had been offered to them by various American manufacturers.

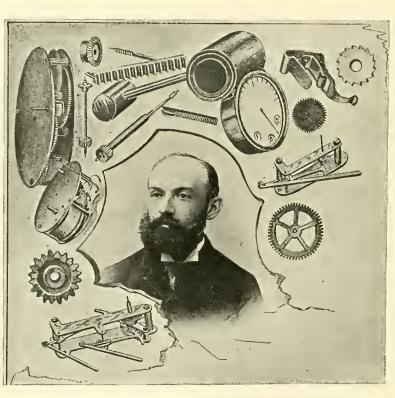
Mr. Hart retired from the business late in 1882, accepting the position of mechanical superintendent of the Waterbury Watch Company, and Mr. Plumb continued the business alone. Since Mr. Hart's retirement Mr. Plumb has had connected with him at different times, Mr. George E. Marcus, now of the New York jewelry house of Jacques & Marcus, and Mr. George B. Webb, the well known mechanical expert, now with Messrs. Wyckoff, Seamans & Benedict, manufacturers of the Remington Standard Type-writer.

To define more partic-

ularly the specialty met by this business, mention may be made of the manufacture of steam gauge movements and counters for water, gas and electric meters. These mechanisms require for their manufacture special machinery, and as they are often delicate in construction, demand for best results, special training of workmen. Unless wanted in very large quantities the makers of the machines or instruments in which these parts-or more properly special instruments in themselves-are to be used, do not find it advisable to undertake their manufacture, and are glad to place their orders elsewhere at satisfactory prices, with the assurance of good results. Many thousands of movements, parts of movements, &c., are made annually to meet this demand, which is a continually increasing one, and it is the policy of the business to make anything in this direction for other manufacturers, from a few wheels, pinions or racks, to orders for thousands of the same, or for the completed movements in large or small quantities, finished and ready for adjustment to the particular mechanism they are to be connected to.

In the line of intricate mechanical instruments, which goods are delivered in their finished condition by Mr. Plumb, prominent

mention may be made of cyclometers, used for recording the distances traveled by bicycles. Owing to the growing popularity of the wheel the demand for these instruments has increased from year to year, until at times, the facilities of the business in this direction have been severely taxed to meet the orders. instruments early in their manufacture, were found to be more exacting in their requirement than was expected, inasmuch as the vibration of the bicycle, shocks and jars from stones, rough roads, &c., had a tendency to throw out of adjustment the delicate parts of the instrument. For this reason but few of the various designs patented have been found serviceable, and of the four standard patterns now on the market, Mr. Plumb is the manufacturer of three, the goods being made to the orders of the companies owning or controlling the patents. In addition to the manufacture of the articles named above, may be mentioned adding machines, odometers, registering mechanism, special devices for optical instruments, devices for the measurement of lenses, and general fine metal work.



DESIGN OF D. S. PLUMB.

MAHER & FLOCKHART.

THE lower section of the city east of the Pennsylvania Railroad, is steadily advancing as a manufacturing centre. Here are situated many of the largest plants in the city, prominent among them being the large iron foundry of Messrs. Maher & Flockhart, (formerly Maher, Robinson & Flockhart,) at the corner of Polk and Clover streets.

Like many of the large industrial establishments for which Newark is noted, this firm had a very humble beginning. In May, 1882, they rented a small building on Polk street, and with the assistance of one employee, commenced the manufacture of grey iron castings. Being practical men and thoroughly con-

versant with the foundry business, they soon established a reputation for making heavy and light machinery castings of a superior quality. The result was that their business increased to such an extent that each year saw an addition to their plant, until every available foot of ground was occupied.

In 1889 they purchased a large plot of land bounded by Polk and Clover streets, and the New Jersey Central Railroad, upon which they erected a brick building 80x200, with additional buildings for boiler and engine rooms and pattern shop, which forms the illustrations herewith given. In 1891 they again found it necessary to increase their capacity, and erected a building 65x85 for the manufacture of light castings exclusively. They now employ over 100 men, the majority of whom are skilled mechanics. Being progressive business men as well as thorough mechanics, they have their foundry equipped with all the latest improved cupolas, power cranes, and every appliance to facilitate the manufacture and handling of castings.

Mr. Maher has served six years as a member of the Board of Education, and is at present a member of the Board of Police Commissioners of the city of Newark.









JAMES FLOCKHART.

JOHN TOLER, SONS & COMPANY.

N 1832, John Toler, a lad of seventeen years, came here from Ireland. He had no acquaintances in this country and little money, but a good deal of pluck and perseverance. He at once apprenticed himself to learn the brass finishing business. After perfecting himself in that line he started the business of pattern making in New York city. After working at that business for some time he became conscious that there was an opening for something that promised better. Having been engaged by some of the better class of cabinet makers, such as Pottier & Stimars, of New York, and the old and respectable house of John Jelliff & Co., of this city, and others, who found much difficulty in getting casters to suit them, (nearly all the cabinet hardware being at that time imported from England and France), consequently in the year 1844 he established himself exclusively in the caster business, his machinery consisting of a single lathe, made with his own hands and a vice, and had continued with varying success to 1861, when he with others, were called by the Government for aid in her struggle for life. The Montgomery Guards, of which he was the captain, volunteered to a man to go to the field. In three months he became major of the regiment. A year and a half afterwards he was honorably discharged an invalid. After many months of nursing he regained health enough to return to his workshop, business being then, as all know, in a very bad condition, and while absent in the field others with plenty of capital had started in the business. [But not disheartened, and buoyed up by the encouragement given by his old customers, he started in with renewed vigor and determination to get at the head of his industry, as the old saying is, to "make a spoon or spoil a horn," and his factory to-day on Adams street, shows what well-directed efforts, perseverance and energy

can accomplish. He at once took in as partner Mr. Joseph Ill, who had been his foreman for years. He then built a factory on Adams street, and next added an iron foundry, to enable him to make his own castings. He next extended his iron foundry, making it 200x53 feet, and continuing to extend until last year, when the only available lot to be obtained was covered by a first-class building 100x65 feet, thus covering from Nos. 108 to 122 Adams street, and Nos. 125 to 127 Jackson street. The machinery is moved by a 100-horse power boiler, built by Lyon & McCabe, and a 08-horse power engine built by Cyrus Currier & Sons, both of this city.

When the facts recorded in this article are read and digested, it would be hard to believe that the readers would not, one and all, call down benisons of blessings on the heads of the gallant Major Toler and his able associates who carry on this industry of easter making in all its peculiar ways. No lady in the land who touches with dainty fingers the shining mahogany bureau, glossy rosewood piano, or tete-a-tete, or handy stand, to change their place in boudoir, parlor or sitting room, or moves it easily or noiselessly over the carpet of softest wool, on casters of wood, copper, brass, bronze, metal, or either enriched with a plating of nickel, silver or gold but have reason to thank the genius who makes the task so light. Far greater cause has the good housewife for rejoicing over the good work accomplished by Major Toler and his son, and their helpmeets indeed the venerable Joseph III, who came into the Major's employ in 1853, and became his partner in 1864, and his son Henry, who began unraveling the intricacies of the easter business as an apprentice in 1876. So thoroughly had the son mastered the trade, and such rare business precocity had he developed, that in 1889, in recognition



PLANT OF JOHN TOLER, SONS & CO., ADAMS AND JACKSON STREETS.

of the same, his father transferred his entire interest in the concern to him, the son becoming the partner in place of his father, and assuming the general management of the great and growing industry, and has continued to fill the place with honor to himself and credit to the concern ever since.

To return from this pleasant digression, far greater still, the toiling thousands of servant girls who would be compelled in these days of bureaus large and bedsteads strong, to perform herculean feats of strength were it not that such wonderful success attends upon this branch of Newark's industrial pursuits. Not one half the strength, energy or patience is required to be expended by either class, the high, low, rich or poor, since the artistic contrivances in the labor-saving casters, which are manufactured by the millions by this company, and find their way under the bedsteads, bureaus, dressing cases, tables, pianos, stands and chairs, causing them to actually spin around the rooms of comfortable cottages or great palaces, and with so great an ease that it might almost truthfully be said that they were under the coutrol of their beck and will.

When the head of the concern came back from war more than a quarter of a century ago, in casting about for a suitable calling In 1889 the company was organized and incorporated under the laws of New Jersey, assuming the title of John Toler, Sons & Company, with John Toler president, and Henry Ill sceretary and treasurer. Their manufacturing establishment is located from 106 to 122 Adams street, and from 123 to 125 Jackson street, between Ferry and Lafayette streets, in this city. They carry on the industry of manufacturing casters and rollers, and so thoroughly well known are they, and so honorable have been all their transactions in the past, their goods find a ready sale all over the United States and the British Dominion at the North, while at the same time large quantities are shipped abroad to meet a rapidly increasing demand for Newark manufactured goods away over the great sea.

The constantly increasing demand for the goods manufactured in this Toler establishment has made it necessary to add to its capacity from time to time, until the present, where they give steady employment to a large corps of working men, women and boys, many of the former, from absolutely necessary reasons, being skilled mechanics and experienced workmen. Of course the amount of capital employed growing larger as the business developed, until at this time it has assumed such proportions as



JOHN TOLER.



HENRY ILL.

upon which to build an industry which would last with life, he found that nothing promised better and so be fixed upon his old caster or roller making, into which he at once put his whole energies, and has continued the business ever since with his sons and company. The industry being of that character requiring immense buildings in which to house the plant and machinery.

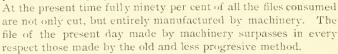
The photo views of the works of this great and growing industry on preceding page, though they do not show their full extent and proportions as do some of those industries which look much more pretentious but fall far behind in the value of their output. The Major, though his recollections are bright, would hardly recognize some of his output of 1844, when he first began manufacturing casters for tables and chairs, such marvelous changes have been wrought, not alone in the increased richness and value of casters made, but also in their beauty and utility, much of this having been brought about by the ingenuity of himself, and several patents having been awarded to him by Uncle Sam, who is never, or seldom, if ever, slow to recognize talent in any of his children, and extend a just recognition of their successful inventions, ever standing ready to throw around them the ægis of his love and the protecting arms of his power.

would have been truly startling a few years earlier.

Such of the readers of NEWARK ILLUSTRATED, who are otherwise interested than in the marvellous growth of this great metropolitau industrial city, and desire to study the exact causes which have led to such a development, and have revealed unto them the correllation of forces which compelled the aggregation here. will refer to the illustrated price list of furniture easters, which the company issued in 1893. In this neatly arranged catalogue thousands of which are found on merchants' desks, in counting rooms and manufacturing establishments all over the world, have said in the plainest possible words, "We manufacture the best class of goods that it is possible to make for the least possible money, and our industry is conducted on the highest principles of honor. We have had nearly a half century of experience, and have not failed to profit by it." With the amplest facilities themselves, and with all the assistance which in obedience to the laws governing manufacturing interests arise from congregation, it requires only a watchful care to have their beautiful industry continue to lead the world, and have the neighboring industries which live and thrive at their doors, echo the response. So say we all.

HELLER & BROS.

HE most useful tool in the world is acknowledged to be the file, and the purposes to which it is adaptable embrace, not only the requirements of the skilled mechanic, but the wants of almost every individual inhabitant. In early days crude files were constructed from the dried skin of a peculiar fish; next they were made from copper and used in working the soft metals, iron was next substituted, and this was finally replaced by steel, which metal is unsurpassed for the purpose.

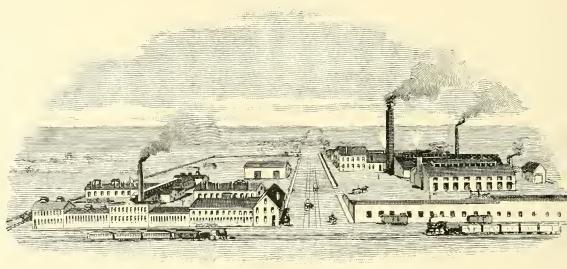


One of the most enterprising firms engaged in this industry is the firm of Heller & Bros., of Newark, N. J. These gentlemen manufacture every description of files and rasps, running in size from two to thirty inches, and in grade of cut, from twelve teeth to the inch, up to the number so large that the teeth become so fine that they are undetected by the naked eye, yet will withstand the most severe test.

The business of the above firm was started in Newark in a very small way by Elias Heller, Sr., in 1836, the trade being entirely with the consumers of this city and the surrounding towns. The panic of 1838, having compelled him to give up his business in Newark, he removed to West Orange, but owing to



ELIAS G. HELLER.



BIRD'S EYE VIEW OF HELLER & BROTHERS' FILE AND STEEL WORKS.

the remoteness of this place as a business centre and his inability to increase the business to any extent while dealing with the consumers exclusively, very little, if any, progress was made until 1866, when his three sons, Elias G., Peter J., and Lewis B., took hold of the business and located at the corner of Mechanic and Ward streets, Newark, and by their energy and push the business commenced to thrive They at once sought to increase the business by soliciting trade from jobbers and dealers in the hardware trade throughout the United States and Canada, thus meeting with no end of opposition from both dealer and consumer as they were greatly prejudiced against American files and rasps, claiming that the home goods could not be made as the English files and rasps which at this time had the market of this country, but by perseverance and hard work, introducing here and there, the firm began to prosper as the consumers began to realize that the Americans could make as good a file or rasp as the Englishmen. In 1872 Lewis B., withdrew from the firm and in 1874, owing to their limited quarters in the city, they removed their plant to the corner of Mt. Prospect and Verona avenues. With the new works and improved machinery the quality of the goods was still further improved, but owing to the fact that they were compelled to buy their steel they did not get as good results as they wished for, as first-class steel is one of the essentials in the manufacture of a good file or rasp, so in 1880 they erected a steel plant for the manufacture of steel for their own use and now they get the best results attainable in their line as shown by their steadily increasing trade.

On account of poor health, Peter J. was compelled to retire from the firm in 1881, thus leaving Elias G., who, with two other brothers, George E. and John J., and a brother-in-law, Ernest A. Geoffroy all of whom had been in the employ of the firm for many years, assumed Peter J.'s interest thus constituting the present firm.

In 1884, owing to their great success with horse rasps, they undertook the manufacture of Farrier's tools and to-day they can offer the public the most complete line of rounding, turning, hand and driving hammers, pincers, nippers, hoof parers, tongs, sledges, etc., to be found in the country.

A bird's eye view of their immense works is herewith given from a sketch drawn on the premises by an eminent artist from the Moss Engraving Company of New York. No work would be complete, especially if the industries are under consideration without a few words being said in regard to what the Heller & Bros. have accomplished, and much less so if it were an illustrated one and did not give such a suberb picture of their great factory buildings as appear on this page of Newark N. J., ILLUSTRATED. That the factories of the Heller & Bros., erected by this

enterprising firm on the large plot of ground adjoining the New York and Greenwood Lake railroad, in the northern part of Newark, are of truly representative character, needs but be seen to verify the declarations. A few hours cannot be more profitably spent by the visitor, be he in pursuit of pleasure or on business bent, than in looking over the plant of Heller & Brothers, where a large corps of skilled mechanics are constantly employed in the manufacture of the great variety of blacksmiths' tools for which they are noted all over the country. As helpmates to their artists, the Hellers have provided for their assistance the very best and latest improved machinery turned out by the world's work shops, in order, that in their turn, they may manufacture for blacksmiths and farriers, tools and instruments which are not only made of the very best material, but so elegantly finished and artistically burnished as to make it a real pleasure for the blacksmith's strong arms to handle them.

The Hellers owe very much of their high standing as business men

and the world-wide reputation of their manufactured goods, to the fact, that they have used from the beginning of their industrial career, only the very best grade of clay crucible cast steel in their manufacture. The brothers have given to the making of this clay crucible steel their own personal care and supervision, thus procuring the much to be desired uniformity of quality, as well as the high grade of steel so important in the manufacture of their ever reliable files and tools. The constantly increasing demand for the tools which the Hellers have made the past thirty-five years, is *prima facia* evidence that good goods are always wanted and that the best is the cheapest. Supplemental to the file industry, which has grown to such immense proportions under their guidance, the Hellers manufacture clinch tongs, buffers, shoe knives, creasers, fore pinchers, pritchels, hardies, knives, blacksmith tongs; cat's head, rounding, hand,



RESIDENCE OF JOHN J. HELLER.



RESIDENCE OF ELIAS G. HELLER.

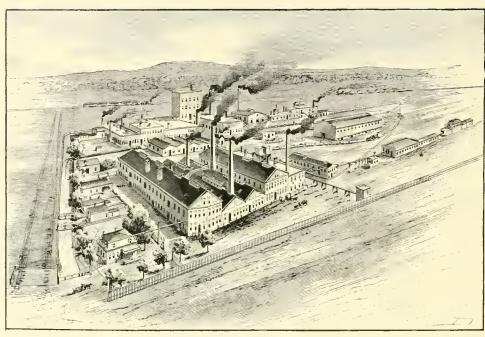
driving and Heller's own pattern of driving hammers, farrier's pincers, nippers and hoof parers, etc., in the long stretch of buildings so faithfully portrayed here from sketches made on the spot.

As the interested visitor, under the chaperoning of one of the brothers or a painstaking employer, passes from department to department and from room to room and is shown their specialties in the several stages of their progressiveness from the plain bar of steel or bit of hard wood, to the perfected instrument of tempered steel with polished handle, finished and packed for market, and going forth to meet the constantly increasing demand of users and consumers on the iron and hardware dealers in the cities, towns and villages all over the United States and the Canadas, European and Asiatic countries, the great Russian Empire, the Empire of Japan, far away Australia and the

islands of many seas.

Hard by the factory buildings and on beautiful plots of ground, the Hellers have built their domiciles and comfortable homes for themselves and families. The house of Elias G. Heller occupies the block of ground on Elwood avenue, between Highland avenue and Parker street. The house of John J. Heller is beautifully situated on the corner plot of Mt. Prospect and Verona avenues. The grounds of both residences are fitted up very artistically and are kept in the orderly way befitting to the dwelling places of gentlemen, who make business a pleasure and homes a sacred retreat. Here, on the piazza of either, one can stand as Washington once did, on these same grounds, and view the landscape o'er, since their location is fixed where the eye can take in with one sweep the tall spires of New York city, Staten Island, the Narrows, Newark bay and the Atlantic Ocean. No plot or spot of ground being high enough, except the top of Orange mountains, to open up such a vista over which Liberty Enlightening the World presides.

As well as being thorough business men, the Hellers have acted their part as representive citizens. The head of the firm has represented his ward as alderman for several years and is prominently identified with all its local business, financial and improvement associations.



BIRD'S EYE VIEW OF THE HELLER & MERZ CO.

THE HELLER & MERZ CO.

PROMINENTLY connected with the numerous interests which have contributed in placing the city of Newark in the honored position it now occupies among the manufacturing cities of the American union, stands the ultramarine blue works of The Heller & Merz Co. The industry was established with two small furnaces on River street, in 1869. The remarkable and steady growth of the business is mainly due to the push and energy of the men who for the past quarter of a century have devoted the best years of their lives to the study and perfection of this article of varied use, an article made on this continent only by this firm. It is due to their enterprise that such an industry was established here and Newark chosen, of all the length and breadth of the New World, as its locale.

In 1872, the company looked for more extensive quarters. These were found at Hamburg Place, where they purchased ten acres of ground on which have been erected sixteen buildings to date. In 1880 the firm connected with their rapidly growing business the manufacturing of aniline colors, the most important being

fuchsine, eosine, blue, rose, bengal brown, orange, yellow, etc. The illustrations convey to the reader a

birdseve view of the immense plant. The ultramarine building is 225x200 feet. from which is shipped to the various cities of the union an output of thirty thousand hundred weight annually. The "ball blue" building is 100 x 75 with a capacity, according to quality made, of from five to ten thousand pounds daily. The works are equipped with every improvement. Three powerful engines with 375 horse power combined, and 44 boilers of 100 horse power each, drive the immense machinery required to work 168 wet mills, 18 furnaces, and 10 dry mills, necessitating the employment of over 100 workmen.

The Central railroad has a siding 3,000 feet long, connecting the works with their main line. In 1885 the entire works were completely destroyed by fire, and yet, without the interruption of business for a single day, the buildings and machinery were replaced within six months. Everything connected with the plant was put in order, and the old industry opened up under a new impulse on a grander scale. In 1889 Mr. Heller died, leaving the care and responsibility of conducting the business to his partner, Mr. Henry Merz.

Few men, indeed, are endowed with the peculiar faculties necessary for the conduct of such an industry as this one described. The continuing of the great work of manufacturing, where the results are only reached through science applied, without a break or ruffle, when bereft of his main support when such a tower of strength as Frederick Heller, had fallen by his side, speaks its own words of praise in a language not to he

misinterpreted or misunderstood. A few hours could not be more pleasantly, and we may say more profitably spent, than in looking over this great establishment, a strikingly beautiful and truthful representation of which is seen in the illustration on this page, as well as the photos of Mr. Frederick Heller, deceased, and Mr. Henry Merz. The story of Newark's features as a manufacturing centre is a fact that has never yet been more than half told.



HENRY MERZ.



FREDERICK HELLER, (DECEASED.)

D. DELANY & SON.

THE spring manufacturing business of Daniel Delany & Son was started in a small way in 1861, by D. & P. Delany. That the business prospered was to be expected, since those who were engaged in it were practical mechanics as well as careful business men, and had learned to know a bar of steel from a fiddle string before it went into one of their furnaces for the white-red heat, or into the cooling trough. Upon the death of Peter Delany in 1865, an opening was left for Daniel Delany's son, John M., who came into the firm with his father, who had successfully continued the business alone until January, 1892, when the firm became Daniel Delany & Son. Along with his father's mechanical ability and extensive practical experience, the young man brought an excellent business education, a firm determination to prove himself a helpmeet indeed to his father, he also brought a level head and strong physique to meet all engagements and overcome obstacles.

A visit to their factory, where are turned out coach, dray, carriage and wagon steel springs, of all sizes, grades, styles and finish, and for a great variety of purposes, indeed, every kind of steel spring in use can be seen in course of construction except those used on locomotives and railroad cars.

Under the guidance of the polite senior member of the firm, the writer was ushered into the steel room and given an insight into the business. Here great piles of steel rolled for the purpose, are seen waiting a turn for the hungry maw of the great steam shears,



CARRIAGE AND WAGON SPRING WORKS OF D. DELANY & SON.

which clip the bars into pieces of the desired length; next the pieces were passed through the great rolls, which shapes them for the close calculating punching machine, which forces the necessary holes in the "leaves;" the "leaves" then visit the beading and slotting machines, where with one heat the slots are sawed and the beads run; then they pass to the fitters, where they are made ready for their contact with great grindstones, and for feeling the touch of the finisher.



JOHN M. DELANY



DANIEL DELANY.

EDWARD ZUSI.



FDWARD ZUSI,

THE subject of this sketch was born in Newark in 1850, and after receiving a limited public school education he went to work in a brass foundry on Mechanic street, at the age of eleven. In 1870, he bought the small foundry that he went to work in as a boy, which under his supervision has grown to be to day beyond dispute the foremost and largest jobbing brass foundry in this city. He found it necessary at this

time in order to keep pace with the growth of his establishment to acquire an education, which he obtained by attending the evening sessions of a business collage. The line of castings are too varied to enumerate, including the very smallest kind of work and some of the largest in all kinds of metals, such as pure copper, brass, composition, white metal, German silver and alumium.

The accompanying cut of his four story brick building, built by him in 1889, will give an idea of the extent of his business. This sketch is a striking illustration as to what it is possible for a barefooted Newark boy to do at home. The secret he claims to be honesty, hard work, pluck and strict attention to business.

F. & H. J. DEVLIN.

NO INTELLIGENT citizen will dispute the assertion, that the city of Newark, N. J., is first amongst the cities of the union in the variety of her industries, the push and enterprise of her manufacturers have made it so, and to them the credit is justly due. In



FACTORY OF EDWARD ZUSI, 80 MECHANIC STREET.



FACTORY OF F. & H. J. LEVLIN, ELM STREET, DETWEEN ADAM AND VAN BUREN STREET.

glancing carefully over the different trades we find among the enterprising brass workers of the city Messrs. F. & II. J. Devlin, brass founders, whose factory is represented in the illustration on this page These gentlemen are practical mer in their trade and are noted throughout the country for their antique designs in furniture ornamentation They manufacture every description of brass composition and metal cast ings, and for light or heavy machin ists' brass work they are unrivaled Their products reach the principa cities of the country and Mexico, and the firm makes a specialty of mixing metals for the trade. These New arkers are generous, enterprising and progressive business men, and have built up an honorable trade by their fair, straight system o business.

L. J. LYONS & COMPANY.

THE manufacture of steam boilers is doubtless the noisiest business in the world, and it is a thousand chances to one that the man who listens to the interminable bang, bang the rattle and batter of hammers, rivets, and the resonant "tititowitz" given out by the great sheets of copper, steel or sheet iron for a single decade of years will find that he has lost much of that acuteness of hearing for which he had been celebrated, but yet it is one of those necessary industries upon which so many others hang, and so important is it that boiler making shall be conducted that good men and true must be at helm.

Such are L. J. Lyons & Co., who have been engaged in the perilous work of making steam boilers for nearly half a century.

they also build revolving barrels, tanks, dryers and a great variety of other such goods as are consumed in the conduct of neighboring industries, machinery making and a great variety of manufacturing establishments. The boilers which L. J. Lyons & Co., turn out have a reputation as broad as the land they live in, and when one of their boilers is set up in an establishment there is a confidence in its strength and utility, which drives away fear of any weakness which were it otherwise might lead to disastrous results. The scrupulous care which is exercised while the boiler is being constructed, and the careful inspection the iron and rivets have undergone and when the finished product is turned out and sent away to its destination, give positive evidence that



PLANT OF L. J. LYONS & CO, COMMERCE AND CANAL STREETS.

Not unlike many others among our representative business men they began business in a small way, having laid their foundations on solid ground, with honesty as the corner stone and integrity to cap it they have reared a superstructure in business achievements unexcelled. To be sure they have made a great deal of noise in the conduct of their business, but it has been done without bluster or show. That the reader may be convinced of this, he has only first to scan with care the photo view on this page, and then visit the large concern at Commerce and Canal streets, where the immense business of boiler making is carried on. Here it is that the plant of L. J. Lyons & Co., is so modestly housed, which consists of all the very best and latest improved machinery and appliances, and where a large corps of experienced mechanics and careful workmen are employed in the making of steam boilers, of all grades, of all sizes and an immense variety of patterns in order to meet the mighty demand for their excellent productions. As well as the thoroughly rivetted boiler to hold the giant steam and check its rantings

the boiler, be it large or small, will remain unshaken under the pressure and strain which it will be called upon to bear. It may be truly said that the industry of boiler making as carried on by this well-known and highly responsible firm has played a very important part in the history of Newark's manufacturing greatness. Thousands of boilers have been wheeled away from their factory, some of them as large as a small house, yet we have to hear of the first accident which can be chargeable to faulty construction, or baseness of material used or which can in any way be brought to the doors of L. J. Lyons & Co.

Such in brief is the record which this firm, which is composed of Messrs. L. J. Lyons and Owen McCabe, who are well-known in the boiler industry of the city of Newark, and are esteemed as honorable citizens has to present. For years their works have had all they could do to fill orders, so confiding has the public become in the honesty, integrity and high order of workmanship of this old and reliable firm, they know that the order has only to be left and the work will be done, and well done.

CHARLES COOPER & CO.

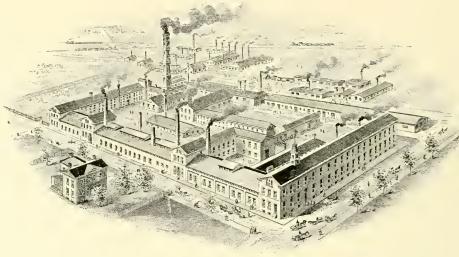
THE illustrations on this and the following page represent the works of Charles Cooper & Co., manufacturing chemists. They are situated at the South end of Newark, between VanBuren, Sanford, Clifford, South and Thomas streets and Bay avenue. Three city blocks are covered with their extensive manufacturing establishment, known to the Newarker as "The chemical works," to the trades as Charles Cooper and Company's laboratories for the manufacture of fine chemicals.

Being located on the Pennsylvania railroad, Waverly and Passaic division, the bulk of the goods as well as raw materials is handled by the trains of that company and but few have an idea of the extent of business, which is carried on from this point of the old tenth ward throughout the United States, and foreign countries.

When Mr. Charles Cooper in 1857, commenced to manufacture a few chemicals for photographers, he occupied one floor in Chatham street, New York, and employed five men. When after thirty years of activity he retired from business the present large works had grown from the modest nucleus in Chatham street, and now ranks first among chemical manufacturing firms.

On January 1, 1867, the present senior partner, Mr. Jacob Kleinhans had joined hands with Mr. Cooper and a few years later Mr. John B. Stobaeus entered the firm.

By that time the young house had outgrown its Chatham street shell and the extended business demanded better facilities. After a most careful consideration the firm decided to put up a new factory in Newark, N. J., having in view the excellent railroad facilities and the growing industrial prosperity of that city. At the same time, the office and ware houses were moved to its present location, the five story brick building, No. 194 Worth street, New York, under the charge of Mr. Kleinhans and Mr. Cooper (the latter retired in 1887) with a staff of about thirty men, tending to the rapidly growing commercial part of the firm, while Mr. John B. Stobaeus assumed entire charge of the manufacturing department. The present immense establishments were



WORKS AT NEWARK, NEW JERSEY.

erected to keep up with the demands made upon the New York house from all parts of the world. Eight large boilers transform the energy of the black diamonds of Lehigh Valley into heat and motive power, and about 200 men, with a staff of chemists, engineers and electricians, are busy, to produce the great variety of goods, of which a glance over the firms price list will convey an idea to the reader.

The works, mostly brick structures, are steam heated and have electric lights throughout, a net work of steam, water and air pipes facilitate the earrying on the chemical processes for production. Huge Corliss engines furnish the power, superheated steam is the source of heat, and powerful air blowers are employed for ventilation as well as for the smelting furnaces.

The goods produced in the establishment may be grouped according to their use by the various industries.

Photography.—A full line of chemicals for this art, up to the latest improvements and novelties in printing and developing. Headquarters for nitrate of silver, gold preparations and refining photographers' waste. All kinds of collodion and all grades of soluble cotton, sulphurous acid, sulphite, bi-sulphite and metabisulphite of soda and pottassium.



JACOB KLEINHANS.



JOHN R. STOBAEUS.

METAL GOODS AND PLATING.—Sulphuric acid of all strengths, nitric acid free of impurities, nickel anodes free of iron and copper, gold and silver anodes; a full line of nickel, copper, mercury, silver, gold, platinum preparations for platers use, bisulphite soda, epsom salt, citric, chromic acid, acid for dipping, cyanide of potassium, C. P. and comm., sulphide of potassium.

MINERAL WATER MANUFACTURERS AND DRUGGISTS—All preparations for artificial mineral waters in a chemical pure state, oil of vitriol, chemically pure acids, epsom salts, free of chlorine, liquefied carbonic acid in steel cylinders. Complete outfits for mineral water manufacturers.

Breweries.—Anhydrous ammonia, aqua ammonia. Complete outfits for treatment of beer with liquefied carbonic acid, bi-sulphite of lime solution for disinfecting.

GLASS SILVERERS.—Chemically pure ammonia, nitrate silver, citric and tartaric acids, cryst and fused, etc.

VARNISH MANUFACTURERS. - Soluble cotton ether, methyl, ethyl,

ture is about 1,000 pounds. One cylinder is sufficient to empty 50 to 100 kegs of beer, according to their distance from the dispensing faucet. The apparatus consists of a reducing valve, bracket, wrench, twelve feet of rubber tubing, copper wire, two vent valves and one cylinder carbonic acid, and costs \$35. Extra cylinders are \$12 each, and \$5 are allowed for returned empties, making the gas \$4 net per cylinder. The firm pay railroad freight both ways, and willingly give a thirty days' trial, with the understanding that the gas thus used, is paid for. Among the advantages of the liquefied carbonic acid gas are the following: The beer retains its effervescence, refreshing taste and wholesomeness to the last drop, even if on tap for weeks. Flat beer will improve while on tap. No bad air from cellar or bar-room is admitted into the eask, as is done by air and water pumps. The contents of the cask can be used to the last drop. Under carbonic acid pressure, beer leaves no settlings in the conducting pipes. Ice is saved, as by the transition of the liquid carbonic acid into gas



CHARLES COOPER & CO., NEW CHEMICAL BUILDINGS. (ACID WORKS.)

propyl, amyl, alcohol, amylacetate, fusel oil, bi-sulphide of carbon, hydrocarbons, borate of maganese, gums, resinates, etc,

Jewelers and assayers.—Bone ash, borax in all forms, soda ash, fluoric and white acids, all mineral acids, parting acid, nitrate of soda and potass, refining of jewelers clippings and waste.

The firm is the largest house in the United States for soluble cotton, ether and alcohols, liquefied carbonic acid, nitrate of silver, anhydrous ammonia, aqua ammonia, bi-sulphide of carbon and every description of anodes.

One of the leading specialties is liquefied carbonic acid gas, the firm being the first to produce this article in the United States on a commercial scale. It is used for carbonating water (soda water) and for drawing lager beer and other malt beverages, and the firm offers to the trade the simplest and cheapest contrivance to draw beer under carbonic acid gas pressure. They furnish liquefied carbonic acid gas absolutely pure, in steel cylinders, tested to 4,000 pounds while the actual pressure, in average tempera-

cold is produced. The largest cask can be used without any danger of the beer becoming flat. The expense for gas is fully repaid by the greater number of glasses drawn from a keg which is under carbonic acid pressure; practical experience having taught that from one to two gallons more can be drawn from a half barrel under carbonic acid pressure, than with any of the old methods. Stock ale and porter kept under carbonic acid pressure improve materially. The apparatus does not require any attention, nor does it get out of order.

Another specialty made, is anhydrous ammonia of superior grade, last year's products having an average of 99 90-100 per cent. of N. H.³ gas, or only one-tenth of one per cent. non-volatile matter. A large stock is carried, from which the trade is supplied at shortest notice and at most favorable rates.

Messrs, Kleinhans and Stobaeus are natives of Germany, and are widely known and very highly and deservedly esteemed by the citizens of Newark, alike in business and social circles, having come here thirty-nine years ago, and enjoy the confidence of the entire community.

THE NEWARK ELECTRIC LIGHT AND POWER COMPANY.

BUT few years have passed since the great Franklin solved the problem of electricity, and opened the way for a line of illustrious successors to build up an institution, at the head of which stands this subtle agent which is revolutionizing the methods of communication, propelling machinery and lighting the world. The first fruit of the great discovery of the fact that the bright flashes of lightning playing along the summer cloud, could be utilized to man's help, and the world's purposes, was made fully apparent through the genius of A. Morse, in the click of the telegraph, which his master mind evolved to startle the nations. Next came forth the wonderful fact from the workshops and laboratories that the bright flashes could be so subdued as to give a steady bright light to take its place by the side of that grand old illuminator of the years, which had been wrung from the finest of the Pennsylvania coal mines. Last though not least of the purposes to which this wonderful agent was next applied was the propulsion of machines and machinery through the medium of those wonderful evolutions of genius, the motor and dynamo. Hardly a single decade of years has passed since the bare possibility of lighting a city or dwelling with electric lights, was mooted, yet today, as the shades of night shut down the highways and byways, the boudoir and parlor are made as light as day, and all over the progressive world the buzz of the dynamo is heard and the electric motor is performing its wonderful work.

All this has been made possible by men of capital, who dared to risk it in upholding the work of genius. Among these who led off with better spirit and with a greater readiness to do and dare in a work of progress, that had within it the element of helpfulness, that needed but the application of that indomitable spirit of push which is the birthright and possession of so many of Newark's business men.

It was right here in the city of Newark where the evolvements in electrical science were made, and where its application to the many uses and purposes to which it is applied, had their first culmination, and the full realization of the grandeur of the industry which has led to its development

and general adoption for lighting and power purposes.

The Newark Electric Light and Power Company, which takes a leading position in this industry, was organized in 1880, and incorporated January 20, 1881.

The first plant was begun late in the same year and business started in the spring of 1882. The first lights were run from the Weston factory at Orange and Plane streets until the completion of its station No. 1, located at No. 25 to 33 Mechanic street.

After the business had gotten fairly started, this plant became inadequate to its demands, so that additions were made and in spring of 1887, the building was enlarged, which more than doubled its capacity. This station has a frontage of 125 feet on Mechanic street and is 95 feet deep and has a capacity of 1,000 horse power. Horizontal tubular boilers and Corliss engines are used.

In September 1889, this company acquired control of the Newark Schuyler Electric Light Company which was then operating a plant at rear of 805-813 Broad street. The steady increase in the amount of business soon brought these stations to a crowded condition, so that further extensions became necessary and the company began to look about for a suitable location where the necessary space could be obtained, so that, if it seemed advisable, its entire plant could be consolidated in one.



THE ELECTRIC LIGHTING PLANT ON MECHANIC STREET.

With this end in view, negotiations were entered into and in May 1890, the company secured a desirable piece of real estate lying between the Pennsylvania railroad and the Passaic river, adjoining the city dock. In June, this company bought out The Thomson-Houston Electric Company, which was operating at rear of 110 Market street. Work was begun in the autumn of that year on a new station on the property just purchased. This station was started early in 1891.

The building covers 90 x 130 feet and is fireproof throughout. The machinery used is of the most modern types, the boilers being of the Morriu's climax and engines of McIntosh & Seymour, Ball and Westinghouse makes. Condensing apparatus was furnished by Conover and Worthington.

Additional engines, boilers and machinery have since been added making present capacity of this plant 2,500 horse power.

The property has a frontage of 350 feet each on River and Pennsylvania railroad, and will provide sufficient room for a plant of more than four times the capacity of the present one. Negotiations are under way for the purchase of additional apparatus which will be added as the needs of business require.

The Newark Electric Light and Power Company was originally started as a sub-company of The United States Electric Lighting Company, and a large number of the same gentlemen were interested in both concerns. In consequence of this close connection, the Newark Company began operating under a

license from the latter company, and the entire electrical equipment of the Mechanie Street Station, as at first installed, was of the United States system.

The Newark Company was also appointed agent for part of New Jersey for this system, and through it numerous small isolated plants were installed for lighting factories and other buildings. After several years experience, however, it was shown that some other systems could be used to good advantage, so that it was decided to terminate the license with the United States Electric Lighting Company, and to use whatever apparatus that

Thomson-Houston systems for arc lighting, are now most extensively used.

This company started business with an authorized capital of \$200,000, but same was increased in 1890, to \$500,000 and in 1892 to \$1,000,000. These increases in capital were made to provide for the purchase of the other companies mentioned, to retire a bonded debt which existed, and to provide for the purchase of a new plant and extensions of lines, etc.

The first president was Mr. Theodore Macknet. He was succeeded by Mr. George B. Jenkinson, who in turn gave place in



THE ELECTRIC LIGHTING PLANT ON THE PASSAIC RIVER.

seemed best. In consequence of this change the alternating system of incandescent lighting was put in, and as this proved superior to the old, or direct current system, it was adopted, and all incandescent lights were changed to this system, which not only gives a steadier and more even light, but requires smaller wires to transmit current for same, and permits of lighting at much greater distances. The Company is now lighting the village of Irvington in this manner—a distance of over four miles from its stations—and is prepared to furnish light to other neighboring towns within a similar radius.

The Westinghouse alternating for incandescent, and the

December, 1887, to the present incumbent of that office.

The officers and directors of 1893 are as follows: John D. Harrison, president; Philip N. Jackson, vice-president and manager; Samuel S. Dennis, treasurer; Abram C. Denman, secretary; Dudley Farrand, assistant secretary; and John J. Gaffney, superintendent.

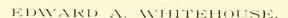
DIRECTORS.—Thomas T. Kinney, William M. Clark, Abram C. Denman, Samuel S. Dennis, F. S. Douglass, Charles H. Harrison, John D. Harrison, George W. Hebard, F. Wolcott Jackson, Philip N. Jackson, Samuel Klotz, Gottfried Krueger, B. M. Shanley, James Stokes, and Dudley Farrand

A T. STEFFENS & CO.

THE saddlery hardware industry of Newark is justly recognized to be among the most stable of any city in the world. The reputation of the firms who are engaged in the trade is tried and trust, worthy, while the volumes of this business and the large amount of capital handled by manufacturers, jobbers and dealers, invariably with the result of honor, at once serves as a complete endorsement of the integrity of the men who are engaged in the industry.

The firm of A. T. Steffens & Co. succeeded the business established by Kelly & Petry in 1875. It consists of Messrs. August T. Steffens, Joseph O. Amberg and Jacob I. Amberg. These citizens give their personal attention to the manufacture of a general line of saddlery hardware, nickel, brass, and imitation rubber goods, and make a specialty of pro-

ducing iron gig and coach hames, for which the house is generally noted throughout the States.

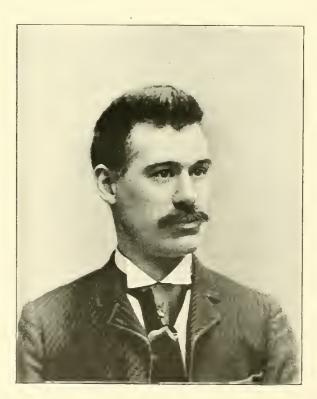


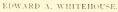
THE enterprise of her citizens in manufacturing pursuits has been most beneficial to an industrial community like that gathered in the city of Newark. In this connection attention is



A. T. STEFFENS & CO., 260-266 MORRIS AVENUE.

called to Mr. Edward A. Whitehouse, saddlery hardware manufacturer, whose striking photo forms one of the illustrations herewith given. This enterprising citizen commenced business in a small way, with but one workman to assist him, in 1888, and at present is able to turn out of his entensive workshop, located at Nos. 83 and 85 Mechanic street, large consignments of the finest grades of harness mountings, with a general line of saddlery hardware. Mr. Whitehouse is a practical mechanic







ADAM KAAS.

ADAM KAAS.

THE manufacturing of fine harness ornaments, letters, monograms, etc., is one of the noted industries of the city, and has been so for nearly a century. Mr. Adam Kaas, whose portrait is shown on the opposite page, is a worthy representative of the trade, and has been engaged in the business for twenty-five years. His factory is located at No. 280 Market street.

Mr. Kaas is an ornament maker by trade, and he is noted principally for the fine grade of goods which he is able to produce. In this line he has but few rivals. The products of his factory reach the leading cities of the country, and have won for him a large and lucrative business.



THE C. S. OSBORNE CO

THE C. S. OSBORNE COMPANY was established in 1826 by Joseph English; succeeded by Wm. Dodd & Co, in 1856; C. S. Osborne in 1858; C. S. Osborne & Co. in 1861, and by C. S. Osborne & Co., incorporated, in 1889, with C. S. Osborne as president, and Walter D. Osborne as treasurer. Through the untiring efforts of its managers, and principally through Mr. C. S. Osborne, the business has grown marvellously, so that this house is the largest of the kind in the world.

They manufacture saddlers', harness makers' and carriage trimmers' tools, and their tools are in use in every country on the globe. It is the rule of this house to employ the most skilled labor, and to use the best materials only in the manufacture of their products. In addition to this, their dealings with their customers have been so satisfactory and agreeable that it has won for them a greater and better reputation in the trade than any house in its line of business.

AUG. GOERTZ & CO.

THE manufacture of brass and metal goods and kindred articles constitutes one of the great branches of industrial pursuits for which the city of Newark is widely noted, and it may also be observed in this connection, that as yet, this branch of trade is confined to a few enterprising houses, prominently among whom may be mentioned the firm of August Goertz & Co., whose works are herewith given in the beautiful illustrations, which are taken from nature by the powerful eye of the photographer's camera. The industry was established in 1881 by August Goertz, Edward Wester and Edward Knecht, in a very small way with a limited capital, and by push and enterprise, with unrivaled workmanship, the struggling firm soon built up a flourishing trade, which has continued to grow apace until at the present writing-1892-it has attained most substantial proportions. The works, located at Nos. 278 to 284 Morris avenue, near South Orange avenue, are admirably equipped with all the latest and most improved machinery and appliances adapted to the manufacturing of every description of purse, bag and pocket-

book frames, from the cheapest to the most costly grades of copper, nickel, silver and gold plate, aluminum, etc. Also every kind of fancy metal goods, trimmings and novelties, for which the house is so famous. The firm employs 250 hands and make a specialty of gold and silver artistic designs that are noted for their quality and workmanship. Many of them which are now being produced were designed and patented by Mr. Goertz in person, and are worthy of special mention on account of their beautiful and delicate shades. The output of the firm commands



AUG. GOERTZ & CO., 278-284 MORRIS AVENUE.

a ready sale throughout the cities of the United States and Canada. The present firm is composed of Messrs. August Goertz and Edward Wester, Mr. Knecht having died in 1890. The former devotes his energies to the outstde affairs of the company, and the latter, Mr. Wester, superintends the manufacturing departments at the works.

The success attending the firm is due in a great measure to the special and careful attention given to all orders, always quoting the lowest possible prices consistent with the character of the

workmanship and the quality of material. The firm, by reason of its nnexcelled facilities, is now in a position to offer the most liberal inducements to the trade.

Parties unacquainted with the manipulations of metals can hardly realize the fact of the stupendous changes through which they are forced to pass in bringing up the cold hard products of the mine from the state of nature to the conditions they must reach before conversion by chemical changes and artistic touches into articles of utility. Probably no one agency goes farther in rendering metals made use of in manufacturing articles for man's purposes and the world's uses, than that of heat or fire, since nearly all are forced to pass through this great leveling, purifying element. The ever startling processes, as witnessed by the novice as he walks with fear and trembling through the great factories where the work is going on, causes a twinkle of merriment to lay around the eye of the artizan, which is ever on the alert as the acts of manufacturing pass before his educated gaze, the least variation from the true line of which is caught at a glance. Even his ear, educated to the sounds proceeding from furnace or pan, recognizes the still small voice speaking the word of warning from the fiery depths of the roaring furnaces, of preparations or purification, when the baser parts are cleansed away, departing as dross, while the pure moulten metal flows into cunningly prepared moulds fashioned by delicate fingers in sand from the low ground of "succoth" (perhaps) arranged to receive it.



AUGUST GOERIZ.

EDWARD WESTER.

JOSEPH BALDWIN & CO.

OR many years the saddlery hardware industry has been one of the most important trades carried on in the city of Newark. Few persons glancing through the pages of this illustrated work stop to consider what a mighty change has been wrought in the past half a century. The development of the city's industries has been above the ordinary progress and advancement of the nineteenth century, and especially does this assertion apply to the enterprise displayed in the manufacturing pursuits. Revert back to the year 1846, and how few of the many present enterprises held sway or existed. Yet there were some, a notable example of which is the old established and timehonored house of Messrs, Joseph Baldwin & Co. No. 254 Market street. This business was established in 1846, by Alexander

Barclay and Joseph Baldwin, under the firm name of Alexander Barclay

JOSEPH BALDWIN, FOUNDER.

& Co., who were among the pioneers in the saddlery and eoach hardware trade in the town, which, as many of the older residents remember, was located on Fair street, near Broad, Atthat time the oldest house in the business was Mr. Stephen B. Sturges and Mr. Seth Boyden, whose factory was on Mulberry street, near Boudinot street. This was at that time the most noted house in

the town where many

prominent Newark manu-

facturers learned the trade. Since that date building improvements have erased many of the old landmarks, but the prominent career of the firm of Joseph Baldwin & Co. has, to an extent, perpetuated the early view in the memory of many.

In 1864 Alexander Perry Baldwin succeeded his father in the management, and Mr. David Martin, a brother-in-law, and an enterprising gentleman of wide business experience, was admitted to partnership, under the old time-honored name of Joseph Baldwin & Co. The plant and a photo of its founder is herewith given in the illustrations so truthfully displayed on this page.

The house has been so long and successfully engaged in manufacturing saddlery hardware, including a line of bits, spurs and chains, that its products in this line are the recognized standard of the trade, and are used by the leading turfmen of the country.

OSCAR WIENER

EW men have done more in all probability to uphold and retain the saddlery hardware manufacturing industry in the city of Newark than the gentleman whom we have now under consideration-Oscar Wiener, Esq.,-a speaking photograph of whom may be seen on this page. He began the industry in 1859. and has continued to conduct it ever since with a success of which any man may well feel proud. His factories are located at Nos. 87 and 89 Mechanic street, on the very spot where, in the smallest kind of a way, he began what has grown up under his own personal tutelage, care and management, an industry which



BALDWIN & CO., 154 MARKET STREET

is probably superior to anything in the line carried on in the city of Newark, and perhaps in the United States. Out of his factory go a class of goods of such a high character that they have only to be appreciated, and make their own market wherever saddlery hardware is sold or consumed,

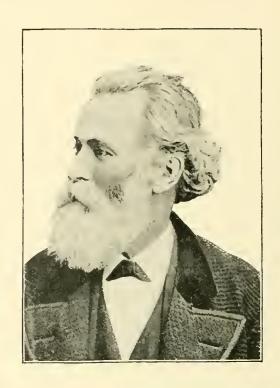
Oscar Wiener is thoroughly well known throughout the city and State, and has a high standing among the fraternal beneficial associations of the same, being a worthy representative, and wherever known is highly respected.



OSCAR WIENER.







OLIVER DRAKE.

DRAKE & CO.

The practice of patent law is ably represented in the city of Newark by the firm of Drake & Co., whose offices are located at No. 789 Broad street. As attorneys and solicitors of American and foreign patents, and as experts in patent causes, this firm have an established reputation and the most extensive practice of any others in their profession in the State of New Jersey. The senior member of the firm, Mr. Oliver Drake, established himself here in the practice of his profession in 1864, and in 1879 the present firm was organized by the admission to partnership of Mr. Charles H. Pell. No firm stands better before the United States Patent Office, or can secure fairer treatment by its officials.

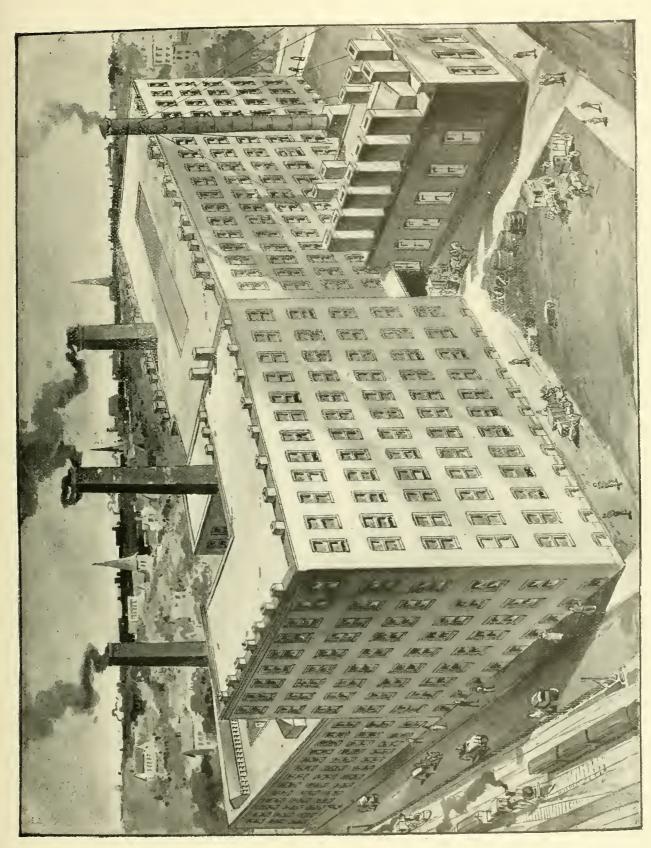
The importance which attaches to the patenting of inventions in this country is evidenced by the fact that during the existence of this firm the number of patents issued by the U. S. Patent Office has increased from about 41,000 in 1864, to 470,000 at the present time, Feb. 23, 1892, and New Jersey stands near the head of the list in respect to the number of inventors and patentees.

The members of the firm are recognized as able, scientific and successful attorneys and experts, and possess every possible facility for conducting every branch of patent law under the most favorable anspices and upon the most satisfactory terms. Their practice relates to the preparation of specifications and drawings, to the making of preliminary examinations as to the patentability of an invention, and to the preparation and filing of applications for patents, reissues, designs, trademarks and labels, and to every item of service necessary to the successful prosecution of the inventor's application down to the time the patent is granted and issued by the office. They have clients in all parts of the United States, and many of the leading manufacturers of Newark employ their services exclusively. Mr. Drake is a native of New Jersey, and one of the best known patent attorneys in the country. Mr. Pell was born in New York, and combines with Mr. Drake toform a firm, popular with all and sound to the core.

THE CENTRAL STAMPING CO

THE Central Stamping Company is the largest and oldest establishment of its kind in the United States. It has several large manufactories, employing many hundreds of operatives. The Newark branch (shown upon the opposite page) has been in existence some fifty years, and produces a vast amount of sheet-metal wares for household, farm and dairy use. It has been identified closely with the growth of Newark, and it has contributed no small part of our growth and prosperity. The offices are situated at Nos. 23 and 25 Cliff street, New York, with which all the factories are connected by telephone.

Our townsman, Mr. George W. Ketcham, is secretary and treasurer, as well as one of the Directors of the Central Stamping Company. He is well known in Newark, having serve I the city as School Commissioner, Conneilman and as a Member of Assembly, in all of which capacities he devoted himself to the extension of public improvements. He was the originator of the present bountiful water supply, having in the spring of 1889, while a member of the Conneil, introduced the resolution which culminated in the joint action of the Common Council and the Aqueduct Board.



WORKS OF THE CENTRAL STAMPING COMPANY,

WALTER L. STARR.

The name of Walter L. Starr is at present connected with the manufacture of hardware specialties, into which line of business he has recently entered. The industry is located on Passaic avenue, near the Paterson depot of the Eric Railroad in this city. The plant is shown in the illustrations on this page. Mr. Starr is perhaps one of the oldest citizens of Newark, who was formerly identified with the saddlery hardware trade, especially the close plating branch of the industry, from which he has severed his connection to enter upon the manufacture of several hardware specialties.

CHARLES M. THEBERATH.

THE city of Newark, New Jersey, has attained the peerless position it now occupies among the great Industrial cities of the American Union, mainly through the enexcelled quality of its manufactured pro-

ducts. There are but few, if any known markets in the world, but what have received consignments of one kind or another, that have been produced in some of the numerous plants erected by its enterprising citizens.

In this connection Mr. Charles M. Theberath, a photo of whom is given herewith, is worthy of special mention. This energetic and public spirited citizen, having been identified with the manufacturing of fine harness mountings during the past thirty years, and has with honor ably represented his fellow citizens in the Board of Freeholders, for eight years in the Common Council, and also as a delegate to the Chicago Convention, and on the electoral ticket of Essex county in 1880, and also as trustee of the City Home.



WALTER L. STARR & CO.

AUGUST BUERMANN.

THE saddlery hardware interests of the city have been prominent among her industries during the past century, are have more than held their own in the trade markets of the country. This is due largely to the push and enterprise of the men when have in the past, and are now engaged in the trade.

The house over which Mr. Bnermann presides was established: 1846, and is located at Nos. 37 and 39 New Jersey Railroad avent Its products consist of Californian, Mexican and South America bits, spurs, stirrups, etc., which are noted all over the Wester continent for their design and workmanship. The only meda and diplomas were awarded to August Buermann, on bits an spurs, by the Centennial Commission. Philadelphia, 1876, and a the World's Industrial Exposition, New Orleans, 1884–5.



CHARLES M. THEBERATH



AUGUST BUERMANN,



INTERIOR VIEW, WILLIAM DIXON & CO., BRUSH MANUFACTURERS

WILLIAM DIXON & CO.

HE city of Newark, New Jersey, is known far and wide for the variety and character of its manufacturing interests, and the products of its numerous establishments are sold in nearly every market of the world. The brush industry stands unrivaled by that of any other city in the country, and its products in this line are acknowledged to be the best in quality, style and workmanship, that can be found in the marts of trade. One of the oldest established, and most progressive, and best known houses engaged in this line of mannfacturing, is that of William Dixon & Co, located at Nos. 84, 86 and 88 Mechanic street. An interior view of the works is herewith produced from a photograph. The industry was founded in 1857 by Mr. Dixon. The works are fitted up with every improvement known to the trade. A large force of hands are constantly employed in making calcimine, whitewash, paint, varnish, scrubbing, dusting, stove, shoe and horse brnshes; jewelers', silversmiths', platers',

dentists', watchcase makers' brushes and buffs; wire scratch and matting brushes; brushes for leather, table oileloth, saddlery hardware, hats, trunk, manufacturers, etc. Brushes of every description are carefully made to order of the very best material, and finished in a style that is creditable to the firm. In 1892 Mr. Thomas H. Pollock was admitted into the business under the present firm name. Both gentlemen are practical mechanics in the trade, and have a thorough knowledge of the brush industry. The house is well and favorably known. Mr. Pollock is a veteran of the late war and a member of Garfield Post, No. 4, G. A. R. He represented the citizens of Newark in the State Legislature in 1890 and 1891.

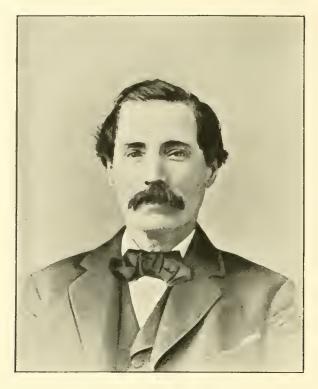
The products of the firm have acquired an enviable reputation for excellence, and the trademark of William Dixon & Co. at the head of an invoice of brushes is generally regarded by the buyer as a sufficient guarantee of the quality of the goods.



WILLIAM DIXON.



THOMAS H. POLLOCK.



EDWARD P. DIXON, BRUSH MANUFACTURER



THOMAS LINNETT, IR.

EDWARD P. DIXON

DURING the past thirty-five years the brush industry of the city has been honorably represented by Mr. Edward Dixon, whose photo forms an illustration on this page. This enterprising citizen established the business in a small way, in 1858, and is at present at the head of the brush manufacturing firm known as Dixon & Rippel, located at No. 50 Market street, where brushes of every description are produced from the best material, and

finished in a style that is creditable to the trade of which Mr. Dixon is a worthy representative.

FRANK KELLOGG.

THE Essex Lead Works, Frank Kellogg, proprietor, manufacturers of lead pipe and sheet lead, and dealers in plumbing and sanitary goods, was established by the present proprietor twelve years ago. It was then, and is still, the only manufacturing plant of its kind in this State. The premises occupied are situated at Nos. 45 and 47 Mechanic, between Broad and Mulberry streets, Newark, N. J. The building is of brick and stone, 40x100 feet, and four stories high, and contains warerooms and factory. The plant is thoroughly equipped with every facility needed in the business, including a 100 horse power Babcock and Wilcox boiler and engine. This house makes a specialty of lead pipe and sheet lead, but they carry a large stock of plumbing sanitary goods, as also gas and steamfitters' and machinists' supplies.



FRANK KELLOGG.

THOMAS LINNETT, JR.

THOMAS LINNETT, Jr., was born in Newark, New Jersey June 29, 1854. After graduating from our public school he entered the employ of J. H. Kirkpatrick, then a leading shi manufacturer, in whose employ he learned the business.

In 1875 he formed a partnership with Charles B. Jolley, under the firm name of Jolley & Linnett, at 165 Market street, in back room and with about a half dozen operators.

In 1882 the interest of Mr. Jolle was bought out by Mr. Linnett, and the firm of Thomas Linnett, Jr., Co. was formed, with Mr. Charles I Marsh as the junior member. The extended the business so that the required the buildings Nos, 165 and 16 Market street, occupying five floors.

In 1888 they removed to Nos. and 47 Mechanic street. Mr. Lou Marbe was then admitted to the firm under the name of Linnett, Marbe Co., which continued until January 1890, when the interest of the parners was bought out by Mr. Linnet who continued the business under the name of Thomas Linnett Manufacturing Company.

The business was incorporate August 10, 1891, under the laws of Massachusetts, with a paid-up capit of \$25,000. The following gentleme are officers of the company: Tho Linnett, Jr., president; Jos. D. Wardsecretary; Frank Coenen, treasurer

A factory 50x100 feet, three storic high, was built at Adams, Mass where 200 hands find employmen The office is retained at No. 4 Mechanic street, Newark, N. J.



MACHINE SHOP OF CHARLES BURROUGHS, 141 TO 141 COMMERCE STREET

CHARLES BURROUGHS.

M. CHARLES BURROUGHS started in the machine business in September 1875, and in 1884, his increasing business compelled him to erect his present shop at Nos. 141 to 149 Commerce street. The building as shown in the above cut is a two story brick structure, the main floor being used by the office in front and the extreme rear by engine room and blacksmith department. The centre or main floor is occupied by the heavy machinery, the second floor for the lighter machines and for special work requiring a certain amount of privacy. Adjacent to the main building he also erected a two story brick building which is used only for the storage of patterns.

Mr. Burroughs has not neglected any opportunity to provide himself with the latest improved machinery, and at present there is not a shop in the state that is better equipped for his line of work. Among his specialties are hydraulic presses of any dimensions and dumps of all descriptions, screw presses, dies or models. He also makes a specialty of designing and manufacturing all kinds of machinery.

J. L. SOMMER

Like the refreshing shower of a hot summer afternoon, starting into new life the parched earth and causing vegetation to leap for joy under its influences, so came the little button hook, bringing benizens of comfort to fair women and thankfulness to strong men. Its precious influence for good was immediately felt everywhere, while this is but one among the many thousands of useful inventions which are the fruit of the genius of Newark men and mechanics, its manufacture along with other novelties in wire, opens up a wide field of industry. Among those engaged in the manufacture of the labor saving, time utilizing and patience soothing button hook, is J. L. Sommer, Esq., whose establishment is located at Nos. 14, 16 and 18

Pearl street in the city of Newark. The excellent photo of Mr. Sommer forms one of the illustrations on this page.



J. L. SOMMER.

ATHA & HUGHES.

NE of the most useful and highly important industries successfully carried on for the past forty-two years in the city of Newark, is that of the enameled carriage and table oil cloth business established by Mr. Audrew Atha in 1550.

For many years no country outside of Europe could produce a perfect article of enameled carriage and table oil cloth, from the fact that artisans skilled in that line of work were to be found only in foreign lands. But this art, like various others, confined as they were to the country of kings, has gradually crept over the water, and at the present writing the city of Newark is known all over the world through the unrivaled brands of enameled carriage and table oil cloth produced in her factories, and by her enterprising manufacturers. For many years past the city has been the centre of the trade throughout the Union, and here, as in but few other cities of the world, does one discover such ample resources, combined with practical experience and unflagging energy.

The illustrations herewith given will convey to the mind of the reader some idea of the extent to which this industry is carried on by Messrs. Atha and Hughes. The immense works are located on the block bounded by Sussex avenue, Orange, Nesbit and Newark streets, and are the largest in the United States. Their history like many other industries which have made the city celebrated in the manufacturing markets of the world is brief. In 1850, Mr. Andrew Atha commenced the business only from humble beginnings, by industry, perseverance and prudent management the business was soon placed on a firm footing, and early assumed a leading position in the enameled carriage and table oil cloth trade. In 1870, Mr. George H. Hughes became associated with Mr. Atha, and from this time forward the business



BIRD'S EYE VIEW OF ATHA & HUGHES' OIL CLOTH WORKS.

ness of the firm has steadily grown to the present immense proportions. In 1890, the firm was merged into a corporation with the following officers: President, George H. Hughes; vice-president, Benjamin Atha; secretary and treasurer, B. 11. Atha. The industry founded nearly half a century ago has won a reputation that is both commendable and enviable for the push and enterprise of the men who have been shrewd promoters of those inventions and improvements, that have enhanced the numerous industries for which the city of Newark, of which they are worthy representatives, is now celebrated throughout the known world. The company maintains a commodious and well regulated salesroom at No. 111 Duane street, New York city. The trademark of this house is known in every part of the world where or cloth is used.



VIEW OF ATHA & HUGHES' WAREROOMS AND OFFICES, NEWARK, N. J.

YATES, WHARTON & CO.

THE original firm of Yates, Wharton & Co., was formed in 1857, by Mr. Henry J. Yates and Mr. John Wharton under the name of Yates & Wharton, both of whom at that early period had become noted in the trade, for knowledge and skill in the manufacturing of fur hats. In 1863, the style of name was changed to Vates, Wharton & Co., Mr. William D. Yocom having been admitted to the co-partnership and attending to the New York salesroom, with which he had been connected as salesman. In 1883. Mr. William D. Yocom having withdrawn. Mr. Charles A. Wharton and Mr. Robert Clark, Ir., were admitted to the firm, as it is now constituted. Mr. Henry J. Yates born in New York city, December 9, 1819, learned hatting with William Rankin to 1843,

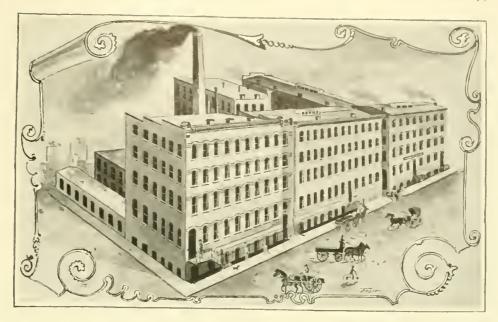
associated with Mr. P. W. Vail in firm of Vail and Vates to 1857, firm of Vates & Wharton to 1863, firm of Vates, Wharton & Co., to date. He has never sought office, but served as alderman, and for two terms as mayor of Newark, and is director in several corporations.

Mr. John Wharton, was born September 25, 1825. He has held no public office, but has devoted his time to the manufacturing department of the business with great success, overcoming difficulties and improving methods of manufacture.

Charles A. Wharton and Robert Clark, Jr., are young men in their prime, holding no position of public prominence, but attending to the details of the business with energy and success.

The firm has safely passed through all the industrial depressions and financial trials of the past thirty years, being controlled by a careful and conservative administration, close supervision of details and systematic management.

The plant is complete in its arrangement and will produce 150 dozen hats per day, their product consisting of men's medium and fine grades, of fancy colors and best workmanship, nothing being allowed to go from the factory if deficient in any part of its



VATES, WHATON & CO., HAT MANUFACTURERS, 142 TO 156 COMMERCE STREET

manufacture. Their market is mostly domestic embracing the United States, including the Pacific coast and Canada,

They employ 300 hands in the several processes of manufacturing and have a merited and well earned reputation for just and fair dealing with their employees, their working people invariably returning to their employ after trying other places for comparison of earnings; and all differences have been amicably settled without recourse to industrial war. Employers and employees have steered clear of the tracks of strikes as the captain and his good sailors avoid the track of the destructive simoon.

To maintain the stronghold on the hatting industry which Newark held for years before and at the time of the war, has required no little skill and acumen upon the part of those who were interested therein. That hatting is a roving industry can be said truthfully and not to its very great disadvantage either, it apparently being outside of the old Franklintonian theory of the rolling stone gathering no moss, for wherever this industry of hatting is carried on prosperity generally smiles, even on what are called "Buckeyes," many of which are found scattered all over the country.



HENRY J. YATES.



JOHN WHARTON

DAVID RIPLEY & SONS.

OR quite half a century there has been conducted in the city of Newark, an industry which stands peerless among peers, and which in the extent and quality of its production is beyond rivalry. We have reference to the steam saw and planing mills of David Ripiey & Sons, remarkably correct and telling engravings of which appear on this page and to which attention is particularly directed, as also the artistic and strikingly effective likeness of Mr. David Ripley its founder, the sons of whom now conduct the business, the father who was the founder of it having departed this life a few years since full laden with years and honors and a well deserved earthly competence. The remarkable plant of this great concern has a convenience of situation surpassed by few saw mills in any city of

the United States and it is the firm conviction of the writer that there is not another saw and planing mill plant, all things considered, that is so happily and advantageously situated as that of David Ripley & Sons, now under consideration. More than a half century of years have passed away since David Ripley, a poor and almost friendless boy came on from Greens Farms in the State of Connecticut, where he was born on the eleventh day of March, 1803. David Ripley brought with him little or no cash, but he brought with him, what was far better, an active brain, a healthy physique and a strong right arm, three great and mighty essentials in the upbuilding of a home and a fortune. David Ripley had his life foundations laid firm and deep in the great and lasting principles of the great cardinal virtues of temperance, fortitude, prudence and justice, and was never known during all his career of active business life extending over a period of more than fifty years to deviate or depart therefrom. He early ımbibed a

hatred for the

institution of

slavery and was

always a fear-

less advocate of

abolition. In his earlier years

he brought

down on his head not a few

maledictions,

but his conviction of right

was strong and

his inbred love

of honor still

stronger and he

was never happier, or showed

up to his neigh-

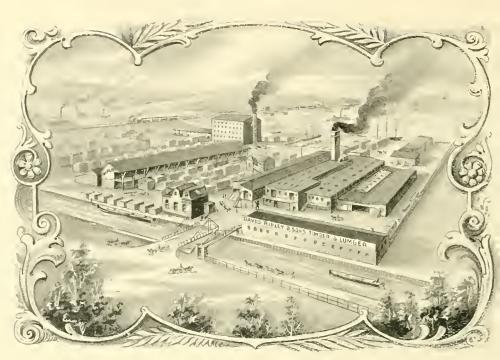
bors in better

form than when

withstanding the taunts of



DAVID RIPLEY, FOUNDER.



STEAM SAW AND PLANING MILL WORKS OF DAVID RIPLEY & SONS, ON PASSAIC RIVER AND THE MORRIS CANAL.

the thoughtless who opposed him. It will be remembered to h credit that he is the father of the Clover Street Industrial Schoo

A marked specialty of the business which David Ripley estal lished away back in the year when Gallant Henry Clay, of the West, made his last unsuccessful run for the presidency alon with our great representative Jerseyman Theodore Frelm, huysen, who ran on the same ticket for vice-president, was the sawing of logs into timber, boards, plank, joists, sills, studding etc., to order. In earlier years David Ripley bought the trees of forest lands of Pennsylvania and New Jersey, chopped them down rafted them on the Deleware and Susquehanna rivers and pilote them into his own ports on the Passaic river and Morris canaboth of which passed his doors. Not a few logs which wer felled in the forests of Georgia and Alabama were sawed into boards and planks in his mill. Few industries have probably don more toward advancing the manufacturing interests of Newar than the saw mill industry carried on by David Ripley & Sons.

Along with their very extensive sawing and planing mi industry the Messrs. Ripley, William A., Charles O. and Wattles, the sons who succeeded their father, David Ripley, wh died on the 30th of May, 1883, have carried on box manufacturin on a very extensive scale. Thousands upon thousands of gree boxes and tens of thousands of little ones go forth from their factory which go to other great manufacturing establishments engaged in the work of making such lines of goods as require careful packing in strong wooden boxes for their protection an shipment, to the marts of trade generally throughout the country

Without a halt or break has this great business gone on, givin plenty of proof that the education of the sons scholastic an business suffered nothing, nor was neither permitted to dag durin the time he was building up his fortune and preparing wit paternal care for the well-being and future of his children.

Besides filling successfully all the responsibilities attaching t such a large business the Messrs. Ripley have kept untarrished the badge of good citizenship, they have ever been read to take part in public affairs, the elder brother, William A., havin been one of the first Police Commissioners of the city, and represented his ward in the Common Council and his Assembly distriction the State Legislature with credit to himself and satisfaction this constituency. John Wattles also filled the responsible offic of Alderman with eminent satisfaction to his constituency.

BROWN'S SHIP YARD.

JUST about where the New Jersey Zinc Works now stand, about thirty years ago, David F. Brown began the industry in a small way of boat building and established Newark's first ship vard. He soon thereafter removed to the spot whence the smoke rises from the great forges and cupolos of the Atha & Illingsworth steel works, from thence to to the present location at Brown street and Lister avenue, where his successor, the present proprietor, Edward G. Brown, has established a marine railway and has gathered around it all the various paraphernalia of boat and ship building. Not a little very interesting history clusters around this family of Browns.

David F., the father and predecessor of the present proprietor, was a son of Noah Brown, of the firm of A. & N. Brown, shipbuilders, who constructed the fleet of war vessels with which Commodore Perry immortalized his name on Lake Erie. It was this same

firm who built the first steamboat, the Robert Fulton, and moulded up the rounded forms of Ericson's mighty monitor which beat the Merrimack and saved the Union.

Mr. Brown now employs from twenty to fifty men as circumstances demand in the building of all kinds of boats and vessels for sail or steam, sailers, lighters, yachts, etc. He also conducts a large business in flag poles and flag pole ornaments, derricks, etc.

It can be safely said that Edward G. Brown, who has conducted the business since the death of his father two years ago, stands at the head of one of the oldest industries in Newark.

Although Edward G. Brown has not the privilege of building steamboats of the Fulton's pattern, or to mould up the forms of



BROWN'S SHIPYARDS, BROWN STREET AND LISTER AVENUE.

another blithe little monitor such as his ancestors built under the eye of the great Ericson, it is well-known that he has the ability and plant, and can call around him such a corps of boat building artists, mechanics and skilled workmen on very short notice, who will assist him in the building of a boat, ship or vessel of any name or nature, which will be a match for any that ever walked the waters of river, lake or ocean. As before noted, the conductor of the present boat building industry and now under consideration belongs to a family of shipbuilders and was brought up to the business, and had, long before accepting the responsibilities, grave in character, which belong to the industry, learned to know the difference between a fish hook and an anchor, in fact like his predecessors, who had won lasting honors and some of

them an undying fame in the work they had done, he had learned the business from stern to figure head. It is worth a visit while a vessel is "in the cradel," in order to witness the proceedings of vessel building or repairing as they go on under the experienced eye and skilled mechanism of Edward G. Brown, assisted by his corps of ship carpenters and caulkers.

L. WRIGHT, JR.

THE illustration herewith given represents the pleasure launch Duplex, one of the numerous crafts constructed by Mr. L. Wright, Jr., of this city, whose business is located at Nos. 9 to 15 Mling street. This house is known in machine trade for its production in wood working machinery, marine engines, elevators, shafting, pulleys, hangers, etc. Considerable attention is given to the building of steam launches and yachts of the highest grade, and at the present time they have just completed what is probably the finest specimen of marine engine work ever constructed and which is expected to develop remarkable speed the coming season.



L. WRIGHT, JR.'S STEAM LAUNCH DUPLEX

of this firm.

J. F. HERMAN & CO.

UST thirty years ago the widely known hat block manufacturing business of J. F. Herman & Co., the largest exclusive manufacturers of hat blocks and flanges, iron dies for pressing stiff hats, and hatters' tools of every description, in the United States, or we may say in the world, was established by what was then known as Pierson & Herman. It was then a very small establishment, the firm doing what business they could in their small shop, corner McWhorter and Hamilton streets, in a room about 20x30. Their business steadily increased until those quarters became too small, and they removed to Kirk's Building, in Kirk's Alley, in a room 40x60, just twice the size of their McWhorter street shop, where the firm made rapid progress until it became necessary, by their increase of business to seek larger quarters, when they came to the conclusion to put up a building of their own, which they did in the spring of 1885, and the first of April of that year saw their building completed, which they then moved into. It is situated at Nos. 69-71 Bruen street and is a

two-story with basement building, 48x72, with a three-story annex in the rear 15×30, which is not shown in the beautiful illustration of their building seen on this page.

In the basement, which contains 2,000 square feet of space, all the lumber is handled, which is purchased by the car-load. Between 75,000 and 100,000 feet are consumed annually. After it is cut up by the large rip. eireular and cross-cut saws, and roughed

Mr. John F. Herman, the senior member of the firm, is a native of Germany. He was born in 1833, at Stuttgart, and emigrated to this country twenty years later, of whom it may be said he has managed the old firm of Pierson & Herman since 1865, Mr. Pierson being incapable through old age to assist in the factory, retired, but still retained his share in the business until his death five years ago, when Mr. Herman continued the business alone until 1889, when he associated with him Mr. Fred Buehler and Mr. Charles Landmesser, both for many years his former employees. Mr. Buehler was born here in the city of Newark in 1856, and Mr. Landmesser claims the same birthplace five years later. They both received their education in our good public schools and colleges. All the members of the firm give their

the moulds are made for the iron die castings, and the well equipped lumber yard. Each piece of lumber is thoroughly

seasoned before being worked, which has been the great success

personal attention to their business, which with their long and practical experience in this line, enables them to have the work performed intelligently by their expert employees. Mr. Herman attends to the factory, assisted by Mr. Landmesser, and Mr. Buehler acts as the firm's salesman. Through their combined efforts it has become one of the most indispensable auxiliaries to the m a n ufacturers of hats, not only in Newark and the State of

New Jersey, but throughout the United States and the Dominion of Canada and Mexico.

In this industry, having its



J. F. HERMAN & CO., 60 AND 71 BRUEN STREET.

out by the machinery, all here in their basement, it is distributed to the different departments of drying rooms or kilns, by means of an elevator.

The next or first floor, 2,000 square feet, is the finishing department. Here are two block machines, two jig saws, two boring machines, two band saws, two block sandpaper machines, two turners' lathes, one curver, one flange sandpaper roller, two buzz planers 20x36, together with the necessary machinery to keep tools in order, such as grindstone, emery wheels, saw filing and saw setting machines. On this floor, in the new wing, is also the office, to the rear of which is the machine department, in which are made the dies for the pressing of hats. This industry is with the hat manufacturers in its infancy, and is bound to develop largely. This firm is making the dies successfully with the latest improved machinery. Adjoining is the engine and boiler rooms, which contain an engine of 50 horse power and boiler of 75 horse power, which furnish ample power for their different machines.

The second floor contains, in part, stock and drying rooms, and the third floor of the extension is also adapted to drying room facilities. To the rear of the building is the plaster room, where home in Newark, is another demonstration of the thoroughly well authenticated fact of the very general benificence of aggregation as applied to industrial pursuits.

No inducement except the fact that here were great hat manufacturing establishments in full operation where the need for the very self-same class of goods as J. F. Herman & Co. could and would make, thus having an assured market for their output at their very doors, could have been offered, or such telling facts presented to give them a confident assurance of success.

Not alone this home market, which grows apace with every new venture in this rapidly increasing manufacturing field, and which is the direct result of this aggregation of industrial plants, is responsible for the marvellous growth of Newark as a manufacturing centre, but because of its geographical position as well. Perhaps the first great leading cause of its acceptance by manufacturing capitalists and wide awake business men, machinists, mechanics, inventors and artists, was found in its great natural advantages of location supplemented by the very great ease with which its transformation to the great variety of purposes can be accomplished, and its being so easily accessible from all points of the continent.

Just at the wide open doors of the two great metropolitan cities of the Atlantic seaboard, and six great trunk lines of railroads, the Passaic River and Morris Canal, over which to transport the manufactured products to their unparalleled markets for selling in.

Not alone is the industry under consideration the recipient of such lasting favors as are sure to flow from the aggregation or concentration of its own specialties, but every other branch is equally entitled to the rare benefits and beneficial results which are continually flowing from rich and enduring fields, which needs but the touch of its kindreds to pour forth its full realization.

Thus has the growth of Newark gone on from step to step in

and there does seem to be some peculiar characteristics in their make-up which are not found in the physical structure or mental endowments of those who find affinities which are foreign to industrial lines.

Let us add that by their industry, alertness and efficiency, and by strict personal attention to business, they have succeeded in gaining the confidence of style leaders in the hat trade, and hat manufacturers in general throughout the entire country. The plant of this concern has been proven a most indispensable auxillary in the manufacturing of hats everywhere. It is a pleasure to notice the existence of a concern that starting out to excel, and which notwithstanding the very many serious obstacles



MEMBERS OF THE FIRM OF J. E. HERMAN & CO.

its progress under these benign influences. When this now widely known and prosperous industry first set up its modest belongings, the promise of its well deserved growth and success was seen at once in the cordial reception which the necessity for its productions prompted from the great concerns within its immediate vicinity, but also from many other concerns in various parts having like requirements in other and distant places.

The wonderful success of the artist's work in sketching the plant of the concern under consideration, combined with the supplemental study of the engraver who furnished the illustration plate for this work, speaks a language which can be studied with lasting interest in the beautiful picture presented on this page of Newark, N. J., Illustrated.

To such men as these who conduct industries which bring such rich grists to the Newark mills, a deep debt of gratitude is owed, which it had to overcome in its earlier career, has by the most indomitable perseverance succeeded in laying solid foundations and is now in the full tide of business prosperity and has won an enduring place in the front rank of manufacturers, standing to-day among the representatives of Newark's industrial interests. Few hat manufacturers in these later days of progressiveness undertake competing without falling back on the helpmeets, which are turned out of the factories of J. F. Herman & Co. Among these are the iron dies which they are turning out successfully with the latest improved machinery for the new system of hat manufacturing in this country. These dies had long been in use in England, but it required the skill and genius of J. F. Herman & Co. to make them here, and they are rapidly gaining an enviable reputation for making the iron as they did the wood, before,

CHAS. OPPEL'S SONS.

THE millions of cigars made annually in the United States require boxes in which to pack them, and this branch of the industry affords employment to thousands of working people throughout the country. thriving city of Newark possesses the leading steam eigar box manufactory of the state, that of Charles Oppel's Sons, situate at Nos. 54 and 56 West street, which is herewith shown in the half tone engraving presented. The business was inaugurated in 1864, by the late Mr. Charles Oppel, and in 1886 his sons, August T. and Berthold, assumed control. They have met with gratifying success, and the business is to-day in a flourishing condition. The machinery and general appointment of the factory are all of the latest and most improved order which greatly facilitates operations, and large orders are filled on short notice. A large assortment of labels of the most artistic designs are always in stock, besides, a complete line of cigar manufacturers' supplies, such as

gum, ribbon, knives, cigar boards, cutters, revenue books, color marks, etc., also numerous other articles that are a necessity to the cigar maker. The factory covers an area of 50x40 square feet, which is barely sufficient to accommodate the number of men and women constantly employed. All their affairs are under the personal supervision of both members of the firm, who are recognized by the trade as energetic business men, and all work done is of the neatest and most perfect standard that it is possible to obtain. A gratifying proof of the popularity of the firm is the number of patrons it can claim in all parts of the United States and Canada, who are able and willing to testify to the merit of its productions. Like everything else in the manufacturing line that Newark



ATGUST T. OPPEL



CHARLES OPPEL'S SONS, CIGAR BOX MANUFACTURERS, 54 AND 56 WEST STREET

taken. What can be said of the other manifold industries carried on in the city of Newark can the same be said of cigar making and the manufacturing of supplies for the trade. To the latter we have only to do in this article, and in calling the attention of readers to this branch of industry, the first move will be for him to take a look at the engraving on this page, which is a faithful representation of the structure in which the industry of Charles Oppel's Sons is housed and where they carry on the cigar makers' supply manufacturing business, and make every necessary article called for by the trade. The growth of the business carried on by Charles Oppel's Sons, of manufacturing eigar boxes. and cigar makers' supplies, points with unerring exactness to the

growth of eigar manufacturi ng not alone here in Newark, but in other cities and towns where there is a demand for their goods and whence they are shipped to meet it in large quantities throughout the year. Something of the magnitude of this industry can be seen from the extent of the output of the Oppels alone and yet they are but one of the many.

will permit his

single moment

to rest upon re-

sults, as they

stand out so

prominently as not to be mis-



SERTHOLD OPPEL.

SCHMIDT & SON.

To just such institutions as this over which the Schmidt's preside, father and son, is Newark indebted for her phenominal growth and material greatness. Without the assistance of the steam saw and planing mill establishments the city would make but an ordinary showing.

This house, now so well and favorably known, began its career nearly forty years ago. Mr. Schmidt had been educated to the business and had early been impressed with the one grand desideratum in wood working, that his timber must be thoroughly seasoned before using. When a piece of board went under his planers, or timber into his lathes, it was well dried, hard and elastic, with a fiber as straight as the bow wood of the native Indian. As his business grew and the want of assistants came upon him he employed none but skilled workmen and the latest and best improved wood working machines and machinery, and at this time there is in constant use in the factory as fine a plant of machines, machinery and wood working tools as are to be found in any

industrial establishment in the country. The factory buildings of this firm which have a truthful illustration on this page are very capacious, and have steadily progressed as the increase of business demanded. The manufactory building is a three story brick structure 50x80 feet, giving a floor room in each story of 4,000 square feet. Along with this they have quite extensive yard room for storing timber and lumber, and yet the demand comes up for still more room than can be commanded from plots Nos. 20 and 22 Broome street. The great variety of styles, forms, patterns and shapes of wood articles which come forth from the doors of their factory would create something of amazement in the mind of any one unacquainted with the wood working industry. The firm makes a specialty of carpenters' sawing and turning, and among the multitudinous products may be mentioned,



SCHMIDT & SON, SAW, PLANE AND TURNING MILL.

columns balusters, line and nitching posts, circular moldings and scores of articles in a great variety of patterns are reckoned among the output. Strangers have been known to stand for hours in the presence of one of their turning lathes while the expert turner dexterously fashions the article of beauty or ntility, close watching him as he guides the sharp tool over its swift flying form of seasoned wood of oak, malioganey, rose wood, pine, hemlock or whatever kind of wood the heart of the operator may be for the time inclined to use for the purpose intended or to fill an order.

The buzz, upright and seroll saws, the planers and moulders as handled by this firm have done their part in the the revolution in house trimming in the last half century. It is surprising, indeed, how beautifully many of these machines, automatic to a great extent, walk through the timber boards and planks placed before them, and it does seem as though by and by they would begin to talk, yes in their own peculiar way they do even now speak a language that is easily interpreted by the manufacturer and banker, and we opine as the years go by and the wealth

of the capitalist unfolds more and more clearly to the view of the genius of inventious, and the guardian and key holder of the still hidden mysteries of mechanics and mechanisms is forced to listen to the persistant appeals to unlock the inner doors of this inner safe and set free for the uses of man the new, which perchance, may be old, that the great evolutions now in progress may startle the world in novelty, value and golden purpose. As the great procession of the industry moves on caparisoned in the finished harness of novelty and usefulness, the acclaim of the great cloud of witnesses will continue to swell in long continued shout, "well done," till the culmination of voice and sound reach the ear of the genius holding by the bridle of persistance the latest and newest of the released, from the great closet of hidden mysteries as another of the world's greatest inventions.



FERDINAND A. SCHMIDI.



HENRY A. SCHMIDT.

FINTER & CO.

WHILE the industry of wagon making is in the same line realy with that of carriage manufacturing, there is yet a mighty difference. and the best explanation thereof which we are able to make in the short space allotted in this work, is that the wagon is made for business and the carriage for pleasure. Now while this statement will not bear too close a scrutiny, it is near enough to the fact for all practical, as well as our own purpose, since in this article we have to do with the industry as applied to the making of both heavy and light farm and brewery wagons, light and heavy drays, carts and business vehicles generally, which is conducted extensively in Newark, not alone in a production for home sale service and consumption, but for outside markets as well.

Mr. Frederick Finter, one of the oldest and most respected German citizens, was born in Germany, June 8, 1814. He arrived in Newark, N. J. in 1834, and devoted himself to the business of wagon making. When he came here there were only five German families in this city. He climbed up the ladder with a sturdy determination which brooked no failure, and as a result of his



FINTER & CO., MARKET AND CONGRESS STREETS.

industry and perseverance he was able, along with six other wagon-makers, to begin business in 1848, at the corner of Hamilton and Bruen streets. Step by step he went on increasing his knowledge and extending his efforts until finally he became sole proprietor of the large business which has since been carried on under his personal supervision up to a few months before he died, which was May 1, 1885. He employed very few helpers when he commenced business for himself and depended largely on his own educated arms and hands to push his steadily growing industry.

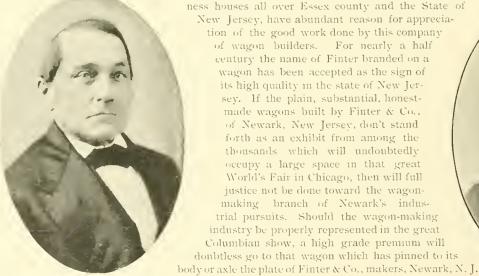
The successful results which followed his efforts show how faithfully he worked and what an imdomitable spirit of determination he brought to bear in the consummation of his ideal project, of building up a great business upon such solid and enduring foundations as would be as lasting as the wagons he was engaged in building. The founder of this now enormous wagon manufacturing industry was one of those sturdy characters, who was not content to scan the present with his clear eye, but was ever peering away into the future and endeavoring so far as possible to reach out for new ideas to build the very best he knew, and with this end in view he made wagons better and better as the years went on, but never so far as he could divine did he build "better than he knew." When the time came that this father of one of Newark's important industries, and one who had laid the foundations in such, of the virtues that should make them enduring as time itself and had cemented it with his own good name, should lay aside his apron and tools for the last time, he could turn the institution over to his son, that he might continue its conduct under the name of its founder.

After the death of Mr. Finter, his son William F. Finter, took full control of the business and, as it increased, year by year, and the factory became too small to meet the requirements of the trade, he purchased the ground in 1891, at the corner of Market and Congress streets and erected one of the finest and most complete wagon factories in the State. He is a thorough mechanic, having learned the trade with his father before he took charge of the business.

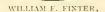
As the reader turns the pages of this Newark, N. J., lettstrated, and art treasure, and reads the short and succinct histories of the several industries, there are few who will find that the illustration speaks a better language than that representing the great establishment of Finter & Co., on this page, one of the oldest in its line

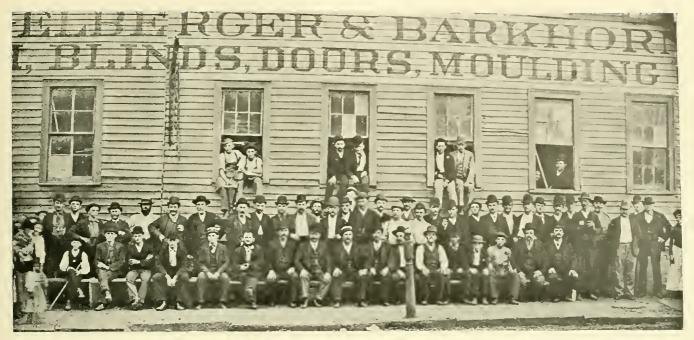
> in Newark, and conducted by his son. Thousands of business houses all over Essex county and the State of

New Jersey, have abundant reason for appreciation of the good work done by this company of wagon builders. For nearly a half century the name of Finter branded on a wagon has been accepted as the sign of its high quality in the state of New Jersey. If the plain, substantial, honestmade wagons built by Finter & Co., of Newark, New Jersey, don't stand forth as an exhibit from among the thousands which will undoubtedly occupy a large space in that great World's Fair in Chicago, then will full justice not be done toward the wagonmaking branch of Newark's industrial pursuits. Should the wagon-making industry be properly represented in the great Columbian show, a high grade premium will doubtless go to that wagon which has pinned to its



FREDERICK FINTER, FOUNDER.





ENGELBERGER & BARKHORN, HOWARD AND MERCER STREETS, AND 305, 307 AND 501 SPRINGFIELD AVENUE.

ENGELBERGER & BARKHORN.

GETTING right down to solid facts it will be found that among those industries which tend most to the maintainance of the high character which Newark is celebrated for, in its buildings wherein is domiciled the capitalist and workman alike, is that of door, sash and blind, frame, bracket and that of general light wood working, as also that of the factory buildings which rear their lofty heads far above their less pretentious neighbors. This branch of the wood working industries carried on in this city must needs take the lead of all others, so far at least as its output

is designed for home consumption, unless we make an exception of the saw mill and carpentery, than to the former must be rightfully awarded the first place or real initiative, unless we are permitted to follow the woodman into the depths of the forest to see him bury the bit of glittering steel into the giant oak, cloud sweeping pine or deep sighing hemlock.

While there are nearly, or quite a half hundred of great establishments where the buzz saw and planers by the scores are kept running like the flash of the lightning and where hundreds of men and boys are kept busy, yet there never seems to be an over supply. All the product from these great establishments which is not caught up and consumed by the home builders finds a ready sale in the markets of the world, and indeed, quite a large percentage of the output goes direct from mills to shipboard for exportation.

Among the great concerns engaged in the manufacture of doors, door frames, window sash and frames, brackets, moldings, etc., is that of Engelberger & Barkhorn, who have their plant housed in the great buildings erected for the purpose on the corner of Howard and Mercer streets, with warerooms at 305, 307 and 309 Springfield avenue. The beautiful illustration here seen gives but an introduction to what the concern in reality is. This industrial business was begun early in the fifties by the Augster Bros., they being succeeded by Engelberger & Barkhorn as now constituted. It was in the year 1881, a little more than a decade of years ago, when the young firm with a capital all told, of less than three thousand dollars, flung their business banner to the breeze and at this writing they stand at the head of

this particular branch of Newark's industries. They have all the latest and best improved machinery and give employment to nearly one hundred skilled workmen, and in 1592 their output of manufactured doors, sash, blinds, frames, etc., had a value of nearly a quarter of a million dollars. The partners are Newarkers and men of standing. Mr. Engelberger not only handles the plank himself, but sees to it that his workmen do their share, while Mr. Barkhorn keeps his eye on the ledger and bank account. They are successful, and the secret lies in the fact that, they have run the business and have never permitted the business to run them.



MESSERS, ENGELBERGER AND BARKHORN



MILL AND OFFICE OF CHAPIN HALL LUMBER COMPANY.

CHAPIN HALL LUMBER COMPANY.

TO OUR readers who have had no real experience with lumber, and even to those who have, the experience that all men who themselves are built of the right material must have had in erecting a house to put the bird of a wife in when they eatch her,

the magnitude of the interest as conducted in Newark, is startling All along the Passaic, from the point where the city rests from the work of crowding the salt meadows back on the sea, to Second river, and even on up through Belleville, great heaps like young



UPPER DOCK AND YARDS OF CHAPIN HALL LUMBER COMPANY.

mountains of pine, hemlock, spruee and oak lumber greet the eye of the passer-by. The toot of the horn of the helmsman of the "sailer" laden deep with lumber from the far away Southern pine lands, or



LOWER DOCK, SHEDS AND YARD OF CHAPIN HALL LUMBER COMPANY

the shrill whistle of the little tug, with its monster barge in tow, and the creak of the opening draw, is music to the ear of the scores of great saw and planing mills which line the river bank, and never seem to get enough to satisfy their hungry "maw." Not alone can the river begin to supply enough for the demand of the hundreds of merchants engaged in the rich industry, but they must needs call upon the seven great railroads to roll into the Newark lumber market thousands of carloads as helpmeets in the herculean work of keeping up with the yearly increase of consumption, and yet there is a constant cry for more! more!

Few cities in the United States can show a lumber and timber record with taller columns of figures to represent them than ean New Jersey's metropolitan city, Newark. Not alone in the amount of timber and lumber which Newark requires for her own marvellous growth and upbuilding, does she excel, but has to her credit a large supply trade in manufacturing articles turned out of her great mills, which are kept busy the year round.

One of these establishments which surely had a happy run of success, is that of the Chapin Hall Lumber Company, whose

great nulls are situated at Fourth avenue and Ogden street. These are three stories high, and cover a plot of ground 100x200 feet in area, a beautiful and truthful engraving of which is seen on the page opposite. But this shows but a tithe of the great vards in which this enterprising company stores immense quantities of North Carolina pine, cypress and white pine, which lies here undergoing the seasoning process, for future conversion into doors, sash and blinds, flooring, mouldings, siding, packing boxes, etc., their sheds and store house containing a large stock manufactured for future or immediate delivery.

This company has several large plants, one in particular, at the foot of Oriental street, on the Passaic river, is worthy of special mention, as well as the immense parent building represented in the illustration with its engine and boiler house extensions.

Of late an immense impetus has been given to the lumber industry by the popular Building and Loan Associations, which are shedding abroad a boundless good to the men of moderate means in aiding them to build homes of their own.

JOHN TAYLOR.

THE city of Newark will, perhaps, in a few brief years embrace all the territory new tripe. all the territory now lying between the Hackensack river and the Orange Mountains. Mr. John Taylor, whose photo forms one of the illustrations herewith given, has been connected with the wood-sawing and planing industry of Newark for the past twelve years. There are but few men of his years who have sawed up or planed more lumber for earpenters' use than he has



JOHN TAYLOR

in the time during which he has been identified with the business. The plant is located in the famous "Phœnix Works," rear of No. 256 Market street. Mr. Taylor is well known in the trade and social circles of the city, as an upright business man and energetic eitizen, and is a worthy representative of the wood - workers of Newark

ALFRED A. BALDWIN.

THE steady growth of the manufacturing and commercial plants, which adorn every section of the city, are monuments to the most free and enterprising people the world has ever seen. In the industry of wood-turning, Mr. Alfred A. Baldwin,





A. A. DALDWIN

C. M. RUSSELL.

VEWARK as it is, gives very few points to show what it has been a sixty of the points to show what it has been, it being largely the growth of the last fifty years. Still there are a few buildings standing that go back in their history to colonial times, and give a fair representation of the taste and ability of their age. At that time very little aid was had from trained architectural work, and the pretentious buildings of that period, and in fact, for a long time after, were the work of skilled carpenters or masons. Great credit is due them for what they achieved, and as history repeats itself, so architecture returns once and again to the best and most refined works of other times. We are only sorry that this spirit and taste does not always hold true, for there came a time in the history of our city when utility and the mighty dollar became dominant, and to this is due the sameness and lack of beauty of a large part of our city. We are only sorry that the substantiality of the work was not as bad as the taste, in that case we might hope for a new outfit for so prominent a place as the corner of Market and Broad streets for instance. But to such training as this can be traced the foundation for the exceptional ability of the building trades of the city of Newark.

Her architects are the equals of any, her building firms have an unrivalled reputation both at home and abroad. The fact that almost all of the work done is by contract proves their fairness and reliability.

On this page the illustrations represent the old and time honored industry of Mr. Charles M. Russell, located at Nos. 38 and 40 Crawford street. Mr. Russell, the proprietor, is the successor to the firm of Russell & Sayre, whose business was established in 1876, and continued uninterrupted until 1891, when this successful partnership was disolved, Mr. Sayre retiring to enter other business. In this factory can be seen the machinery that enables the modest house of to-day to be finished far better than



C. M. RUSSELL



C. M. RUSSELL, BUILDER, 3 AND 40 CRAWFORD STREET.

costly mansions of times gone by, almost everything in the building trade is here produced, work is given to a large force of men, and the facilities for trades, etc., equal to any other.

It addition to the necessary machine work for their own business, they do all kinds of mill work, sash, blinds, doors, mouldings, etc., for the trade, personal attention is given to every part of the work, and a specialty is made of odd furniture, glass fittings, etc. At the corner of Washington and Kinney streets is the lumber yard annex of this business, where an assortment of everything for the retail trade is kept.

Mr. Russell is a practical mechanic himself, a native of Morris county, he came to this city at the age of 17, was an apprentice in the shop of Mr. Ezra Reeves, Mr. E. R. Carhuff being foreman at the time, just after completing his apprenticeship, he with some half dozen others of the same shop enlisted in the service of his country. Mr. Russell joined the old city battalion and spent some time in drilling in the old burying ground under Captain Kinney, he was finally mustered into Co. K, Second Regiment, New Jersey Volunteers. After an honorable term of three years service the survivors of this regiment were mustered out. Mr. Russell resumed his trade, and after several years was taken in as partner by his old employer, Mr. Ezra Reeve. After entering into business with his nephew, Mr. Sayre, as before stated, their work extended to all parts of the country and city, several fine churches and many of the finest residences were creeted by them. Mr. Russell is a member of Garfield Post, G. A. R., is one who takes a great interest in the welfare of the city, and at present is a member of the Board of Education.

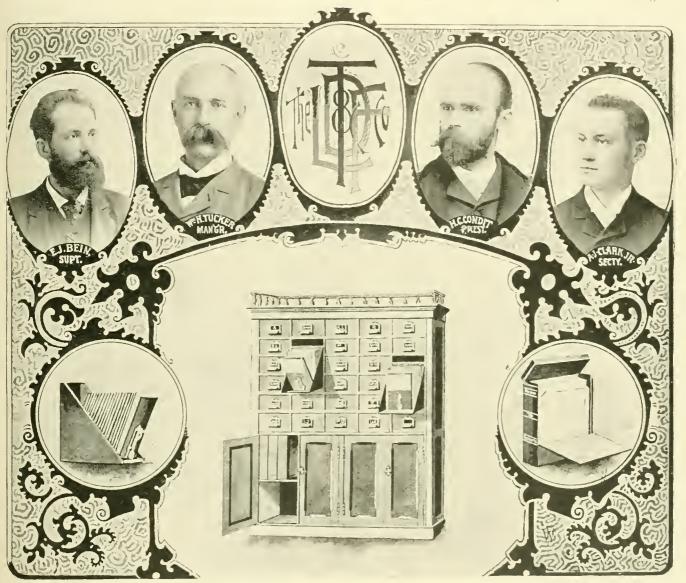
The career of such a man is but a representation of what our American citizenship can do for those who are energetic and enterprising. The art of building is the oldest of all the arts, and while perhaps not as honorable as some of its sister arts, yet it is full as important, the spirit of architecture has shaped the destiny of nations, with its advance we may see the growth and increasing wealth of every nation that fostered it, wi hits decline how quick the fall. It is largely educational. A mind growing in an environment of taste and refinement will become the intelligent citizen. In our country we do not see the grand specimens of architecture such as are seen in the older countries, they have had their use no doubt, but here we do not wish to see the grand cathedral, while perhaps under its shadow a hovel, the home (can we call it home?) of an honest family. Philanthropy should not spend its time and money in fostering pauperism, but build beautiful homes for the poor, and rent and sell them reasonably.

TUCKER LETTER & DOCUMENT FILE Co.

A QUESTION long since settled in favor of Newark, is the fact that in no place of equal population, are there so many men of real inventive genius, so many men whose evolvements have gone farther towards the mechanical, scientific and artistic revolution, which has not only startled the world by the brilliancy of the marvellous achievements in the past, but has kept them on the qui vive of expectancy for inventions still more startling, and the record has kept unfolding, while the face of the present, all wreathed in smiles of satisfaction, has been kept

true, but just such a one as has brought down showers of rich blessings upon his head and put money in his purse. No greater boon has ever been conferred upon business and professional men, clerks, correspondents, and indeed everybody who ever received a dozen letters or a thousand, or as many papers or other documents of any name or nature, than this William II. Tucker did when his fertile brain gave birth to this wonderful piece of ingenuity simplified, known as the Tucker Letter and Document File, and the Automatic Suspension Cabinet, in the compartments of which they can all be filed away for future reference.

Some of the grandest inventions ever patented have long laid



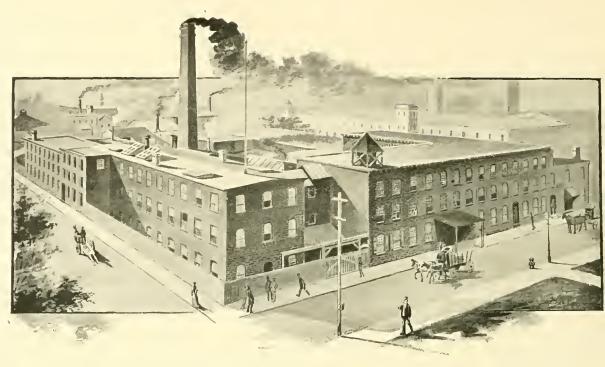
bright by the hope of grander things in the future. Some of these have flashed upon the world like comets in the midnight sky, with their brilliant train of meteoric attendants, to have a brief and showy existence, then to pass away forever. Others, coming forth in the nick of time, have passed the ordeal of years of trial riding triumphant over all obstacles, and taking their place in the people's favor and been accepted as standards in their line. Thus has it been with the invention of William H. Tucker, a Jerseyman and Newarker to the manor-born, who when he heard the clarion call of his country in the hour of her danger, went forth to fight her battles as a soldier, and stood side by side with hundreds of brave comrades who gave their life a ransom, while he returned to shower blessings on the people. In his patented Letter and Document File, a simple contrivance it is

dormant for the lack of development, but a better fortune has waited upon this, which has fallen into the hands of men who do not allow anything to sleep or slumber that they have to do with. The company engaged in the work of the manufacture of these almost human office and business men's necessities, was organized in 1887, with H. C. Condit as president, E. P. Backus, treasurer, A. Judson Clark, Jr., as secretary, and E. J. Bein, superintendent, with the patentee, a large stockholder.

The beautiful illustration seen on this page speaks of the merits of this wonderfully unique invention, in a language not to be misinterpreted or misunderstood, and even so in the photos of the officers, there is in every face that look of a determined purpose and remarkable will power seen at a glance in the likeness of the successful business man.

STEWART HARTSHORNE.

MONG the A inventions which are the outputs of the genius of Newark men, there are few, if indeed any, which have added more to the real comfort and pleasure of the housekeeper and uses of the people in general, than the marvellous patent roller of Stewart Hartshorne, the great manufacturing establishment of which is seen on this page. and is conducted by himself.



WORKS OF STEWART HARTSHORNE, SHADE ROLLER MANUFACTURER, HARRISON, N. J.

SAMUEL O. CRANE.

IN 1837, Samuel O. Crane, whose photo is one of the illustrations on this page, came to Newark with the object in view of making this growing industrial centre his home. Even at that early day, Newark had a name and fame which was far-reaching, and there were few places that were better known for the great variety of its manufacturing interests. Mr. Crane had already learned the carriage-making calling, and at once went to work at his trade, and kept his eye open for business chances for himself. After three or four years he opened up the industry of bending woodwork for carriage builders. Indeed he was the founder of that branch of Newark's 'varied industrial pursuits. After conducting the business for some years, he was joined by a Mr. Bedford, and the firm became Bedford & Crane.

He then became interested in the quarry business with George Brown. In 1862 he sold out to A. G. Wheaton and return-

ed to his old carriage or wheel - making business in connection with George Neefus. After several other successful changes Mr. Crane, though now well up in years, is engaged in introducing Wilson's, a thoroughly good and popular, fire escape, with a view of organizing a stock company for its manufacture and sale.



S. O. CRANE.

ALEXANDER TURNBULL.

O'N THIS page may be seen the photographic likeness of Alexander Turnbull, deceased, who was for many years connected with the carriage making industry of the city of Newark. He was really an expert carriage maker, having learned his trade in his father's workshop. The industry which he conducted was established by his father, Mr. James Turnbull, in 1819. For nearly half a century this princely man was honored and respected, and few men were more deeply mourned when he died.

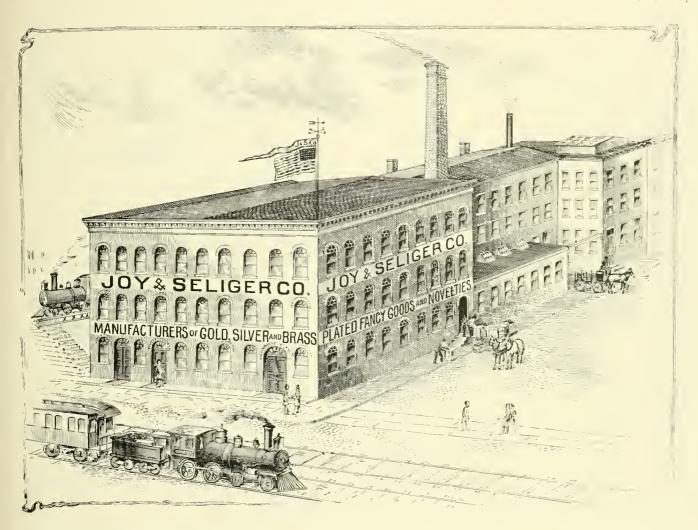


ALEXANDER TURNBULL, (DECEASED).

JOY & SELIGER CO.

FeW industries carried on in the city of Newark have so many really satisfying attractions as that conducted by the enterprising young men, Charles Joy and Alfred E. Seliger, in the elegant buildings covering the plot of ground extending from Nos. 53 to 57 New Jersey Railroad avenue, a beautiful illustration of which appears on the pages of this work. They conduct the business of manufacturing novelty goods from aluminum, white metal and brass, into an immense variety of styles, classes and patterns of goods, for an almost multitudinous number of pur-

department of the well-known Riley & Osborn Manufacturing Company. Into the business they brought but little capital, but had what served them perhaps far better, plenty of pluck and vim, and a full up and running over measure of determination to win. Brawn and brain were their active and reserve forces, and as the happy result shows, both were used to excellent purposes. But their's was a notable example that in business all is not fair sailing; the craft may be gliding along before the fair and favoring breeze, the sails swelling in such a beautiful and satisfying way



poses, consisting in part of everything in the toilet line, a great variety of millinery goods, photo frames of many styles and patterns, ornamental mirrors, photograph and other albums, photo frames, patented elastic belts for both ladies and gentlemen, fancy metal cases and boxes of every description, and many other articles in the fancy goods line.

The legal style and title of the conductors of this industry is the Joy & Seliger Company, of which Charles Joy is secretary and treasurer, Alfred E. Seliger is president, and Charles Henry Batkin, superintendent, with J. H. Dreyfuss, chief of office.

The Joy & Seliger Company began the manufacture of novelties in 1890, Charles Joy and Alfred E. Seliger joining hands in the purchase of the plant of the Newark Fancy Goods Manufacturing Company. It was the first business venture of the young men. Mr. Joy left the teller's window of the Manufacturers' National Bank, and Mr. Seliger the post of manager of the fancy goods

but there are hidden rocks and shoals beneath the calmest of seas. Their gallant industrial ship was heavily laden with goods for the holiday trade, and under full sail to meet the markets of the world, wide open to greet them, when the cry of fire in the old Walsh building, where they were located, compelled them to suddenly tack ship and seek another harbor, trans-ship their plant and set sail anew. The bud of promise which was opening up so beautifully for its future (wonderful) fruition was checked for a while, but with such spirits at the helm, and on the bridge, it didn't take long to conclude the purchase and fit for their purpose their present imposing, capacious and convenient quarters.

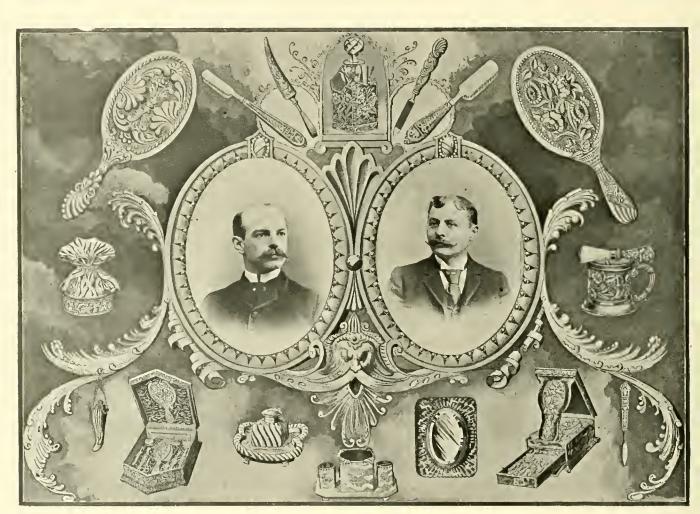
With that quick perception for which they are noted, they saw in the building at the corner of New Jersey Railroad avenue and Hamilton street just what they wanted, and unhesitatingly purchased it and began the work of refitting for the purpose of carrying on their growing industry within its walls. By working

double gangs of men, and pushing it night and day, the remodeling went on as if by magic, and in a very much shorter time than would seem possible, the beautiful structure, a photo engraving of which is here presented, was ready for occupancy. In fitting up the building they have spared no pains or necessary expense, and it is safe to say, considering all things, that in its sanitary and heating arrangements, and for convenience in all respects, and for the comfort of the employees, it has few if any superiors. Our artist has done a superb piece of work in the photo engravings of Mr. Joy on the left and Mr. Seliger on the right, surrounded by representations of samples of their novelties in such manufactured products in all their clegance. With such consummate skill is the arrangement made, and so evidently careful in every detail has the artist been, that the picture as a whole is worthy of the very

all appliances, the fruit of the genius of the best mechanics in the country, to assist them, it is quite impossible to meet the great demand, and in order to increase the supply, they have already in contemplation a very great enlargement of their new works, and of course this means an expansion of business and a large increase in the number of employees, so the point of success which they may finally reach is hardly conceivable.

When the fortunate readers of this art treasure, known as NEWARK, N. J., ILLUSTRATED, casts his eyes over the illustrations, and sees the faces of the managers of this novelty industry, they will naturally wish to become better acquamted with the men and their history. That they may not be altogether disappointed, a short sketch for their perusal is herewith given.

Charles Joy, the secretary and treasurer, is the son of Charles



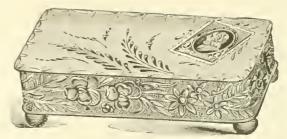
DESIGN OF JOY-SELIGER CO.

highest commendation. Altogether the new building of the Joy & Seliger Company is a model of completeness and commodiousness, and does great credit to their pluck and enterprise. They deserve a trade that will make even their present almost unlimited facilities seem inadequate, and it is earnestly hoped that they will get it.

Such a phenomenal success as has marked the career of this young firm, is indeed remarkable. It is intensely pleasant to record the fact, that in less than three years the output of their industry in the exceeding beauty, high quality and attractive appearance of their goods, is giving them the call in the markets of the world. Such a universal demand is creating everywhere, they find it difficult, even with their corps of from 135 to 150 employees, and the finest automatic machinery, stamps, dies and

Joy, who died in 1873, and a brother of the late Colonel Edmund L. Joy. His a Newarker to the manor born, and is now, in 1893, about thirty-two years old. He was educated in the Newark Academy, under Dr. S. A. Farrand, graduating from that instition in 1888, and is now the president of the Academy Alumni Association. After leaving the academy he entered the Manufacturers' National Bank as a subordinate clerk, where he remained under the instruction of Gen. Plume, soon rising from one grade to another, till he became the paying teller, which post he resigned on going into business for himself. Besides keeping a close watch over the minute details of his manufacturing business, he acts the part of a good citizen by doing his share in the several lines. His honored father was long a deacon in the First Baptist Church, which is now the Peddie Memorial, and Charles is the

Sabbath-school superintendent, having been his own unanimously elected successor from year to year for eight years. The school numbers about 600 pupils, all of whom love and respect their superintendent. It will be remembered that Mr. Joy is the Sunday-school superintendent who, while looking into the muzzle of a pistol, pluckly drove out the Sabbath-breaking Sunday-school disturbing rowdy who came into his school some years ago with intent, as he said, to do it up, but was fortunately done up himself by Superintendent Joy, who promptly ejected him. Mr. Joy is also a member of the Board of Trade, and takes great interest in the affairs thereof. He is a member and sergeant of the justly celebrated Essex Troop, and isn't afraid that his friends shall see that he takes pride in his military skill and soldierly bearing, and is also major of the popular Frelinghuysen Lancers.



THE JOY & SELIGER STAMP CASE

Alfred E. Seliger, the president of the Joy & Seliger Company, is a Prussian by birth, and has been in the business since boyhood. He is a thorough mechanic, both practical and theoretical; a graduate of the high technical School of Leipsic and Montjoie on the Rhine. After working for a while in Berlin, Eupen, Hanover and Goettingen, like many of his brothers, he bade adieu to the fatherland and turned his face toward the setting sun. On his arrival in this land of promise he stopped a short time in Baltimore, then came to New York, where he obtained employment at once as superintendent of the fancy goods department of the Berlin & Jones Envelope Company. After this he stopped a few years with the Elliott Manufacturing Company, as manager. Better



THE J. & S. COLUMBUS CLOCK.

advantages offering, he accepted a position as manager of the fancy goods department of the then well-known Riley & Osborn Manufacturing Company, and came to Newark. His early career and the case with which he obtained employment in a strange land and among strangers, gives a notable demonstration of the great value of a technical education to a young man starting out in the world. Thrice armed is he who is well grounded in the theory of his calling. While Mr. Seliger keeps the business close in hand, scrutinizing every detail with unturing care, and with a push and vim which is a part of his strong but elastic nature, he keeps the fire of business success brightly burning. Like his partner he has a social good nature, and loves his lodge, for he is a bright Mason and well up in the workings of the mystic art. He is a director in the Board of Trade, an institution which he delights to honor, all the workings of which he studies with much interest. He is also president of the Columbus Market Company of New York. While Mr. Seliger, as it is easily seen, is a very busy man, he never forgets his soldierly instincts or martial bearing, or that he is a Prussian. That he may keep bright the memory of Moltke and Kaiser William he is a member of the popular Essex Troop, and is an ex-captain of Company G, Eleventh Regiment, New York State Militia.

Charles Harry Batkin, the polite and efficient superintendent, is a native of Birmingham, England, and has been a member of the firm from the beginning, and upholds his part right manfully.

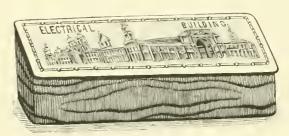
The members of the firm are all gentlemen, and it is pleasant to meet either of them in their elegantly fitted up offices, whether for business or to have a little chat. As they flit through the factory and are always busy as busy can be, they never are in such a great hurry that they haven't a moment for the amenities.

Besides the home offices at the works in New Jersey Railroad avenue, from Nos. 53 to 57, they have extensive salesrooms at No. 634 Broadway, New York, and at Nos. 133 to 135 Wabash avenue, Chicago, and at No. 13 Wellington street, East, Toronto, they maintain their extensive Canadian sales establishment. Thus from these storehouses and salesrooms of the output of the Joy & Seliger Company of Newark, N. J., go forth to meet the demands the trade of the world.



E TOMONON S. FATTENTO

THE JOY & SELIGER HAIRPIN BOX.



WORLD'S FAIR TRINKET BOX, PAT. JAN. 10, 1803. 2213.

THE RILEY=KLOTZ MANUFACTURING CO.

A BOUT the year 1853, Mr. John M. Riley came to this country from England. In 1857 he began manufacturing in a small way, satchel and trunk hardware, and other small articles from metal, in the basement of the Kremlin Building, Broad streeet, opposite William. A short time afterwards he moved to the Franklin Building, corner High and Mill streets; from there he moved to North Broad street, thence to Essex street, and from there to the Hedenberg Works. In 1868, whilst manufacturing in Mechanic street, he was burned out. During that same year, Mr. P. P. Lynch, an employee of Mr. Riley, was admitted to partnership, and the firm became Riley & Lynch, and so continued until the death of Mr. Lynch in 1883.

Riley-Klotz Manufacturing Co., a company of which our city may justly be proud. The purchasers entered into possession of the property on the 9th day of March, 1891. The officers of the company are Samuel Klotz, president; Thomas Nichols, vice-president; William M. Clarke, treasurer; Theodore J. Gerth, secretary; B. J. Riley, superintendent. A number of the leading business men and capitalists of Newark are among the stockholders. The directors are Samuel Klotz, William M. Clarke, Thomas Nichols, Theodore J. Gerth, Edward H. Duryee, John D. Harrison, Lewis J. Lyons, William H. Davol, Carl A. Lehmann, Thomas J. Regan and Bernard J. Riley. The capital stock is \$200,000

The new firm recognizing that to Mr. J. M. Riley, more than to any one else, was due the fact that the business had grown from



WORKS OF THE RILEY-KLOTZ MANUFACTURING CO., NO. 17 AND 19 MULBERRY STREET.

After the fire in 1868, they moved to Division place, occupying a portion of the building now occupied by the present company.

On the death of Mr. Lynch, the firm was changed to Riley & Osborn, and so continued until it was merged into a stock company, under the title of the Riley-Osborn Manufacturing Co, and continued as such, growing to immense proportions, until January, 1891, when, owing to dissensions between partners, the entire concern was thrown into the hands of a Receiver, Hon. J. Frank Fort having been appointed such by the Court of Chancery, on petition of the partners, January 16, 1891.

On the 14th day of February, William M. Clarke, Thomas Nichols and Major Samuel Klotz, three well-known business men of Newark, made a proposition to the Receiver, to purchase the entire plant, real estate, tools, stock and machinery. The proposition was accepted by the Receiver, and the Chancellor confirmed the sale. Thus came into existence what is now the

nothing to a great industry, retained the old gentleman in their employ in an advisory capacity.

The buildings occupied by the company are located at Nos. 17 and 19 Mulberry street, and 8, 10, 12 and 14 Division place, having a frontage of 40 feet on Mulberry street, and a depth of 100 feet on which there is a six-story brick building, one of the best constructed manufacturing buildings in the ci y of Newark. They have a frontage on Division place of 100 feet, and a depth of 123 feet, which is entirely covered with a four-story brick building, except a small court in the centre.

The entire factory is equipped with the best machinery that can be secured for the purposes for which they are used. It is claimed that over \$300,000 have been invested in tools and machinery alone. The total floor space of the factory is more than 75,000 square feet.

It would be impossible to numerate even a small portion of the



WORKS OF THE RILEY-KLOTZ MANUFACTURING CO, Nos. 5, 10, 12 AND 14 DIVISION PLACE

articles made by this company. It is claimed that the numbers run to over seven thousand. They make bag and satchel frames and trimmings and trunk hardware, metal campaign goods of every description, toilet and manicure sets, all sorts of metal fancy goods and novelties, military and society goods; sample case and trimmings, album and Bible clasps and mounts, fancy box handles, hinges and ornaments, ladies' belt buckles and

trimmings, metal buttons and cloak clasps, millinery ornaments, fancy brass ornaments for mounting. Specialties in fancy stationers' goods, match holders, thermometer stands, smokers' sets, whisk broom holders and handles; fine lamps and bronzes, fine art metal goods in cast brass and bronze, musical metal goods, band lamps and cornet mutes, metal dog collars and dog collar trimmings, bridle front chains and bands; hardware

specialties, pocket, hand and dark lanterns, metal numbers and letters, the Star patent oiler and engineer's lamp, in short, anything or practically everything that may be made from metal.

The new firm have been very successful, and to-day the business stands as one of the greatest industries in the city of Newark, employing when in full operation, between three and four hundred people, and paying in wages more than 5125,000 per annum. Their goods are sold throughout the entire United States and Canada, and markets have been lately reached in some foreign countries. The New York store is at No. 529 Broadway, corner Spring street.



OFFICERS OF THE RILEY-KLOTZ MANUFACTURING COMPANY.

DIXON & RIPPEL.

THERE is perhaps no one interest in Newark to-day which has shown such a healthy and continued growth as the brush business. The manufacture of high grade brushes constitutes a very important industry. The establishment of Dixon & Rippel is not only the most prominent, but is also the oldest established in this city. In the year 1857 this house was founded by Mr. Edward Dixon, the senior partner of the present firm. In 1866 he admitted Mr. W. Dixon to partnership, and the firm became known as E. & W. Dixon. In 1891 the above firm dissolved and Mr. Edward Dixon continued the business under the name of Newark City Brush Manufactory. A few months later Mr. Albert A. Rippel was admitted to partnership and the firm became known as Dixon & Rippel.

Mr. Edward Dixon, the founder of the firm, is an old citizen of Newark. He is a practical brush maker, and has been actively identified with the brush business in this city since 1852. The old sign (Newark Brush Factory) can still be seen on top of the factory building, at Nos. 50 and 52 Market street.

Mr. Albert A. Rippel, the junior partner, is a native of Newark, and has been actively identified with the brush industry since 1880, having grown up in the business from boyhood. He represents what is called young blood in business, and since his connection the firm has experienced a



DIXON & RIPPEL'S BRUSH WORKS, CORNER MARKET AND PLANE STREETS.

continued increase in business. He is one of the few men who are to-day called successful salesmen. The high grade brushes manufactured by this firm are fast becoming celebrated for their superior construction, durability and practical working qualities. Always using the best materials, and combining the highest mechanical skill with thorough experience, they feel confident in claiming to produce the best brushes in the market. This firm enjoys the distinction of carrying on a general brush manufacturing business. They are not confined to any one particular branch, but manufacture everything in the line. Their trade in consequence



EDWARD DINON.



ALBERT A. RIPPEL.

is very large, and extends all through the United States and Canada.

Mr. Rippel personally attends to the business on the road, and also directs the movements of other salesmen which the firm employ.

The firm occupies the entire building at No. 50 Market street, and also part of No. 52. It is four stories in height. The salesroom and office occupy the first floor. The second floor is the stock room. The third floor is the jeweler brush department. The entire upper or fourth floor is devoted to the general manufacture of brushes. They also occupy a floor with power in the Hedenberg Works, where all the boring, sawing and woodwork is done. Every facility is employed pertaining to the business, and the services of about thirty-five to forty workmen are required. They are the sole manufacturers of the Dixon & Rippel Patent Leather Varnish Brushes, standard numbers 30 and 70. The line of goods manufactured embraces brushes for jewelers, silversmiths,



INTERIOR VIEW, OFFICE AND SALESROOM.



INTERIOR VIEW, MAIN BRUSH MAKING DEPARTMENT

men of quick husiness energy, and have a practical knowledge of the business they are engaged in. They have a high reputation for honesty, and fully merit the confidence which is continually being placed in them. The stamp of Dixon & Rippel on a brush is of itself a sufficient gnarantee of its superior workmanship and quality.

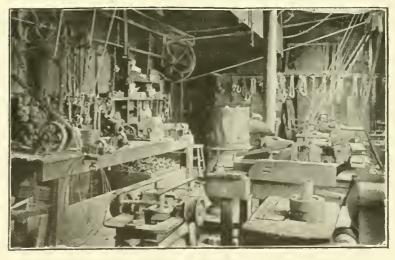
The illustrations on these two pages will convey to the reader a general idea of this important industry. The cuts represent only a small part of their plant, which is now being operated to its fullest capacity. The firm contemplate making extensive improvements in the near future, which will enable them to largely increase their business. Employing every facility pertaining to the business, it is not surprising that the firm should have a national reputation, and should hold an enviable record in connection with their prompt, accurate and satisfactory dealing. The photographs of the proprietors will be readily recognized as representative business men of Newark, who have the interest and general welfare of the city at heart.

dentists, platers, watchcase makers, metal workers, leather workers, hatters, oil cloth, saddlery hardware, shade-cloth and wall paper manufacturers, in fact everything in the shape of brushes used in a manfacturing business.

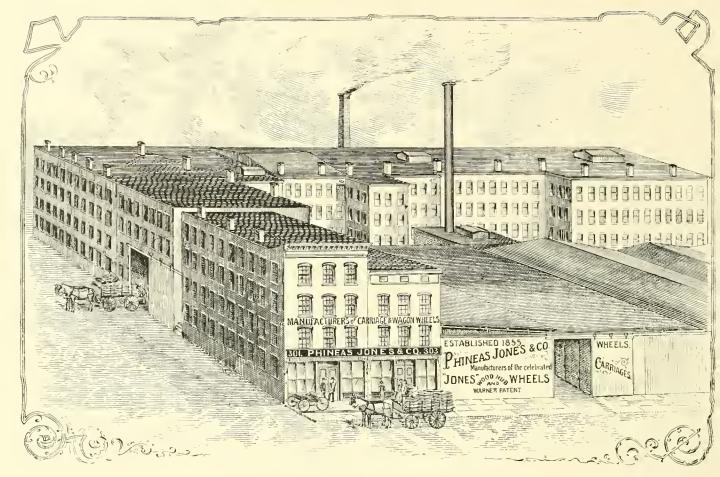
The firm has also added what is called a paint line. It embraces brushes for painters, varnishers, kalsominers, paper hangers and artists. The success attained in this line is remarkable. The firm now claim to produce brushes which are superior to any in the market in this line.

They constantly have on hand a large stock of manufactured brushes from which consumers can select. All orders which have to be made up specially are promptly attended to, and filled as soon as possible.

The stock and variety of household and toilet brushes on hand is also large. The firm does both a wholesale and retail business, and consumers find it to their advantage to deal with them. Messrs. Dixon & Rippel are both gentle-



INTERIOR VIEW, BORING, SAWING AND WOODWORK DEPARTMENT,



PHINEAS JONES & COMPANY.

DRIOR to 1840 all carriage wheels were made by hand by the carriage makers of the country, without the aid of any machinery whatever, the spokes being shaved out by hand, the hub morticed by hammer and chisel, and in fact, the whole wheel constructed in so slow and laborious a manner that a single set was considered an entire week's work for one man. In the year 1840 S. G. Reed, of Worcester, Mass., established a factory on a small scale for the manufacture of wheels as a separate and distinct industry. He employed only one man and an apprentice. This apprentice, named E. J. Whittemore, learned the trade thoroughly and came to Elizabethport in 1855 with his brother, O. A. Whittemore and Phineas Jones, and they, under the firm name of Whittemore & Jones, established a wheel manufactory, which was the first in New Jersey. In 1856 the Messrs. Whittemore retired, and Mr. Jones conducted the business successfully alone until 1860, when Mr. William H. Baldwin was admitted, and the firm name was changed to Phineas Jones & Co., as at present constituted. In 1860 the business was removed to Newark, and in 1864 their present buildings were purchased, which have been enlarged and extended as the increase of business required, until they are at present extremely spacious as shown by the above illustration. From the commencement of business the principle of the house has been to make the best constructed wheel possible, and to do this by the aid of improved machinery and skill and care of manufacture. Phineas Jones was a natural mechanic, and much of the wheel machinery in use to-day was first conceived by him.

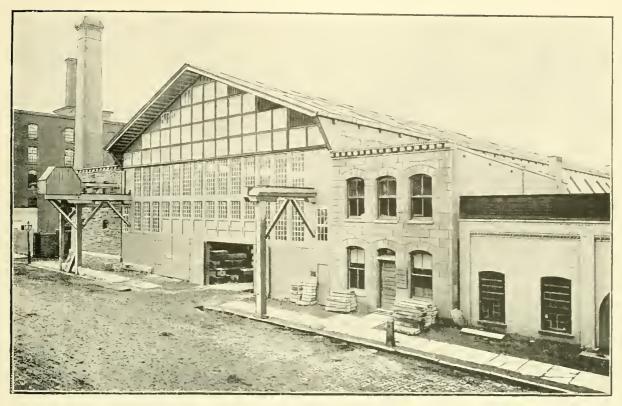
The firm of Phineas Jones & Co. enjoy the reputation of making the best wheel in the world, and this reputation extends not only throughout the entire United States, but also into Canada, England, France, Germany and Australia. It is a reputation built up and maintained by the greatest perseverance, and has been and will be most zealously guarded. The reputation of the Jones wheel is of such magnitude, and is so universal, that it is

an acknowledged fact among the carriage trade that a vehicle will sell easier and for a larger price, if the salesman can assure his customer that the Jones wheel is under the same.

For the protection of the buyers of carriages, the house many years ago adopted a distinctive style of number, which is stamped on the face of the hubs of every set of wheels they manufacture. These numbers are composed of straight lines only, without curves, and they appear only on the genuine Jones wheels. The first grade wheel made is also stamped "Jones' Best," for the further protection of the buyer.

Phineas Jones, the founder of the house, died April 19, 1884. During his life he was extremely popular with all those with whom his business brought him in contact. He was prominent in public and political life, having represented his district in the State Legislature during 1874 and 1875, and in 1880 he was elected to Congress from the 5th Congressional District of New Jersey, and declined a renomination only on account of failing health. In the city of Newark no one was more highly respected than he, and his death was universally regretted.

The firm at present consists of Mr. William H. Baldwin, who has been with the house since 1859, and Mr. Henry P. Jones, the eldest son of Phineas Jones, who was admitted in 1875. The efforts of these gentlemen have been directed toward further increasing the high reputation already earned, and that they have done this is shown by the fact that their business is larger and the quality of work produced higher than ever before. Their annual production is about 20,000 sets of wheels, which are shipped to all parts of the world. A striking peculiarity of the house, and which will serve better than any other to illustrate the business methods and character of the firm, is the long term of service of the men employed. Many have been with the house for twenty-five years, and a few for thirty-five years. Father and son are often seen working side by side.



WORKS OF GEORGE BROWN & CO., CUT STONE CONTRACTORS, 264 TO 270 PASSAIC STREET.

GEORGE BROWN & CO.

THE above cut represents the street front of the stone-cutting plant of Messrs. George Brown & Co., and is the largest and best equipped in the city, and in fact there is no stone-cutting plant in the country which is as well arranged as this for doing work quickly and well. The business was started in 1850 by Mr. George Brown, corner Market and Ward streets, and has occupied the present location for about twenty years. The yards are entirely under cover, and extend from Passaic street to the Passaic River, where the rough stone is discharged from vessels by a large steam crane on the dock. The entire yard is traversed by two traveling steam cranes, seventy foot span, and capable of carrying a weight of fifteen tons to any part of the works.



GEORGE BROWN

The yards being entirely covered, work is carried on continuously without regard to weather, thus enabling this firm to push ahead with their contracts and have the stone stored dry, ready for prompt delivery. The machinery consists, in addition to the steam crane, of gang and rip saws, planing machines, rubbing beds and turning lathes, in fact everything necessary to carry on this business as required by these pushing times.

As samples of the kind of work which is entrusted to the firm of George Brown & Co., we have only to point to the twelve story Prudential palace of industrial insurance, which stands a beacon of prosperity in beauty of architectural grandeur, the material for which they furnished and placed in the walls. The beantiful building of the Delaware, Lackawanna & Western Railroad Company, at the corner of Exchange Place and William street, New York, which they completed in the very short period of seventy-two days. To the imposing structure on the corner of Market and Washington streets, which they can point to with equal pride. This building they erected for the United States Credit System Company. They number among the many other superb structures which stand to their credit, the Buckingham Hotel, the Columbia College buildings, and the General Theological Seminary buildings in New York city, and The Mutual Benefit Life Insurance building, the Clark residence on Mt. Prospect avenue, the old Post Office building and the National Newark Banking Company in this city. Also the Paterson Savings Institution in Paterson, N. J.

Besides the work of erecting buildings, George Brown & Co. take in the line of monumental work, and many of the richest monuments of the Newark cemeteries, as well as those of Greenwood, Woodlawn and Trinity cemeteries, in New York, have been turned out by this firm. Among the many beautiful monuments this firm have made and erected are the Firemens' Monument, Mr. William Clark's, Hon. F. T. Frelinghuysen's, Hon. T. B. Peddie's, in Mount Pleasant Cemetery, and Mr. James Smith, Jr's., in the Cemetery of the Holy Sepulcher.

So complete are the arrangements of this firm, in every respect, that they are able to turn out work more quickly than any other firm.

A. H. WOODWARD & CO.

THE firm of A. H. Woodward & Co., consisting of A. H. Woodward, of this city, and Charles W. Maxwell, of Pond Eddy, New York, was established by its present proprietors in 1878, for the purpose of quarrying and selling bluestone for street, sidewalk and building purposes. In order to supply the largely increased demand for good sound material, the firm utilized the resources of the Delaware Valley, and quarries were opened along the line of the Eric Railroad, which are prolific in supplying immense quantities of the finest and most attractive grades of bluestone. The principal quarries of the concern are located at Pond Eddy, Pike county, Pennsylvania, also Pond Eddy, Sullivan county, and Deposit, Broome county, New York. An average force of 175 men is employed at these quarries in cutting out and handling the stone which is shipped by cargo and by carload to all points along the Atlantic seaboard.

The Newark Bluestone Company dates its inception from March, 1888, when it was founded by A. H. Woodward & Co., in order to facilitate the advancement of the bluestone trade in the city of Newark and suburbs, as well as throughout the State.

the rise of water had washed away the slight earth covering and it felt the touch of the footstep of the fisherman or hunter in pursuit of fish or game. But the time came when the iron horse had penetrated the wild regions where the rich bluestone lay awaiting his coming. Capital was not long in pointing out the way to the quarrymen who stood ready to open the priceless mine, and to-day an industry in the bluestone of the mountains is in the full tide of a prosperous career. Thousands and thousands of cords of great slabs of the precious stuff finds its way over all the great railroads, to the yards of the city, the very choicest of which reach the extensive yards of the enterprising company under consideration, over the Erie Railroad.

Here in the great saw mills the monster slabs are torn asunder, passed to the planers, dressers and rubbers, where they are fitted for incorporation with brick, mortar or timber, in the huilding operations being carried on, or to take their place at the curb and side of the street, where they make the finest and most durable sidewalks in the world. The architect never pleases the fancy better, nor satisfies the eye more readily, than when he turns out a combination in which bluestone is a component part of the building of his work. Bluestone always looks well, whether it be



This company became incorporated under the laws of the State of New Jersey, and the officers are A. H. Woodward, president; C. W. Maxwell, vice-president, and William F. O'Connor, secretary and treasurer. The premises occupied by this company cover an area of 375 x 225 feet, fronting on Passaic street, opposite the Erie Depot, and running back to the Passaic River. The stoneyards and docks are literally covered with all kinds of rough and dressed stone for building purposes. The mills and cutting sheds, located at the north end of the tract, give employment to seventy-five skilled and experienced hands; and as the buildings are equipped with the best stone-working machinery, operated by steam power, the facilities for producing large quantities of rubbed, sawed, planed and dressed stone are apparent. Among the well-known local buildings supplied with the product of this company, are the Essex County Penitentiary, the American News Company, the Fidelity Title & Deposit Co., Messrs. Wilkinson, Gaddis & Co's, warehouse, Mr. Gottfried Krueger's residence, United States Electric Lighting Company, Mile-End Thread Works, and many public school buildings of this city.

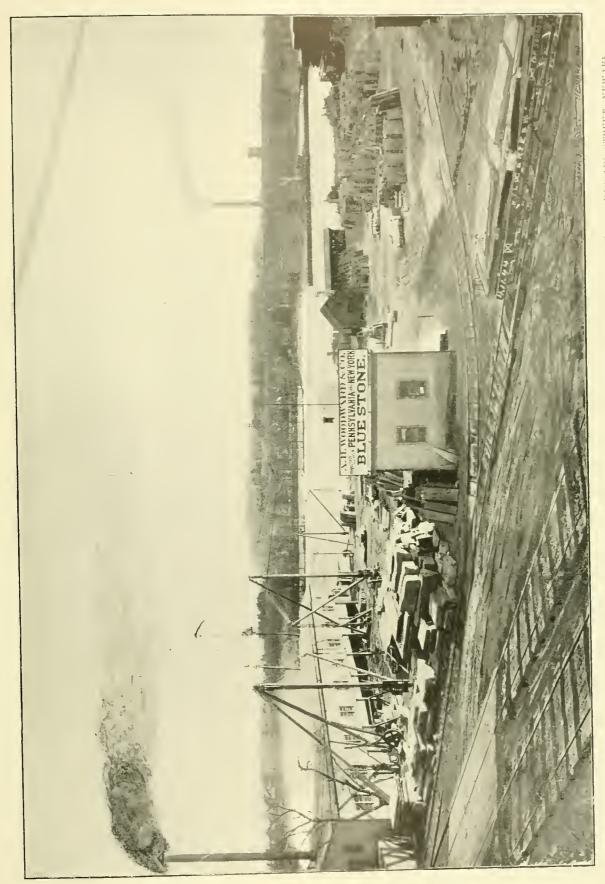
The untold wealth which lies buried in the mountain regions of New York and Pennsylvania in the bluestone of nature, is indeed fabulous. For thousands of years it rested untouched, except as here and there along the banks of rushing rivers where

in foundation, for trimming, in side walls, or for cap stone, and with the brownstone of the home quarries, pressed brick from Philadelphla, or common reds from the Hudson.

Although the bluestone industry is yet in its infancy, enough has already been done to settle the fact of its superior lasting qualities wherever exposed to the influence of climate and weather, and so far as its qualities of resistance to the tread of busy feet of man or beast is concerned, it is beyond question superior to anything else yet used, and to use an old but trite saying, "it wears like iron."

Standing at the gates of the bluestone yards of Λ . II. Woodward & Co., watching for a few moments the unloading of the heavily burthened cars of the Erie, direct from the quarries at Pond Eddy, and the loading of the great drays constantly arriving with the beautifully dressed and polished stone, a wonder came up that would not be satisfied till it had an explanation as to where such immense quantities were consumed.

To this the answer came: "Look abroad over the great city of Newark and its surroundings, and away over the State and across the Hudson, at the buildings erecting and the interminable artwork of sidewalks, and away along the seaboard, already in realization of its beauty and endurance, and demanding its consumption."



OFFICES, VARDS AND WORKS OF THE NEWARK BLUE STONE CO. AND A. H. WOODWARD & CO., D. TO 1.2 PASSAIC STREET, NEWARK

M. MAYER & SON.

TO make a declaration is one thing, but to settle a fact is another. Sometimes mistakes are made in the latter owing to difficulties surrounding, which are sometimes left unsettled, since their plain, honest look, too often leads to evidence involved being taken for granted without proper inspection. In the former, mistakes are unnecessary and unealled for as the fact should stand out in the full blaze of truth before the declaration is made.

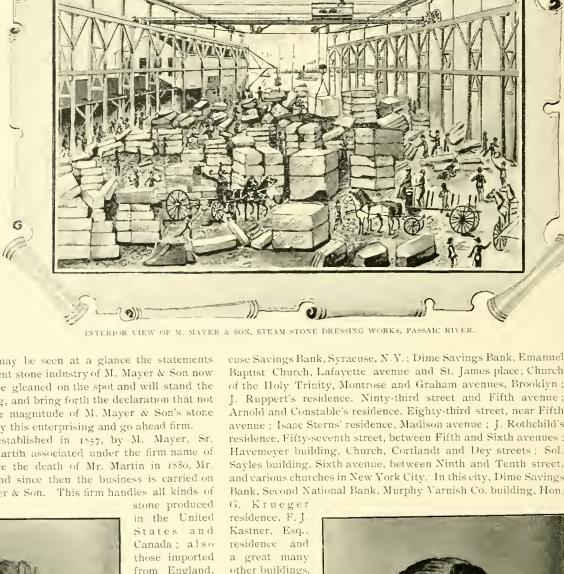
In NEWARK, N. J., LLLUSTRATED, SO guarded has been the pencil of the artist and so fortified the pen of the writer by authentication, that no picture or statement has found a place on its pages but what

is truthful. Thus, as may be seen at a glance the statements made in regard to the cut stone industry of M. Mayer & Son now under consideration were gleaned on the spot and will stand the test of the most exacting, and bring forth the declaration that not half has been told of the magnitude of M. Mayer & Son's stone industry as conducted by this enterprising and go ahead firm.

This business was established in 1857, by M. Mayer, Sr. Shortly after, Mr. J. Martin associated under the firm name of Mayer & Martin. Since the death of Mr. Martin in 1880, Mr. Mayer, Jr. succeeded and since then the business is carried on under the name of Mayer & Son. This firm handles all kinds of



M. MAYER, FOUNDER.



from England, Scotland and Germany. Among the buildings erectcd by this firm are A. T. Stewart's Memorial Cathedral, cathedral schools, bishops residence, etc., at Garden City, L. I.; Cathedral of the Holy Cross and Church of our Lady of Perpetual Help Boston, Mass; Syraeuse Savings Bank, Syraeuse, N.Y.; Dime Savings Bank, Emanuel Baptist Church, Lafavette avenue and St. James place; Church of the Holy Trinity, Montrose and Graham avenues, Brooklyn; J. Ruppert's residence. Ninty-third street and Fifth avenue; Arnold and Constable's residence, Eighty-third street, near Fifth avenue; Isaac Sterns' residence, Madison avenue; J. Rothchild's residence, Fifty-seventh street, between Fifth and Sixth avenues: Havemeyer building, Church, Cortlandt and Dey streets; Sol. Sayles building, Sixth avenue, between Ninth and Tenth street, and various churches in New York City. In this city, Dime Savings

other buildings.

The establishment is located on the Passaic river, between the Market and Centre street stations of the Pennsylvania railroad and has all the facilities required to exccute large con tracts with dispatch, such as diamond saws, rubbing beds, planing machines, etc.



M. MAYER,



JAMES REILLY, STEAM DRESSING STONE WORKS, PASSAIC RIVER, HARRISON

JAMES REILLY.

THE cut stone interests of the city forms a very important industry carried on in the city of Newark. Among the enterprising citizens who represent the trade are to be found some of the shrewdest and ablest business men in the United States.

Prominently connected with the business in this city, for nearly forty years has been Mr. James Reilly, whose yards are situate on the Passaic river, nearly opposite the Centre street depot of the Pennsylvania railroad.

On this page is seen an illustration of the extensive works of James Reilly, as well as the speaking photographic likeness of Mr. James Reilly, the founder of the stone cutting industry as truthfully represented in the illustration. From quarries all over the country the stones are brought in bulk by river and railroad, where they under go the preparations necessary for fitting them to enter into the great stone structures which are growing under the magic touch of skilled masons all over the land. This is done by the help of the lattest and best improved saw and polishing tables run by steam, and by the chisel and mallet of the practical stone dressers, a large number of whom are given constant employment. Something of the extent of the cut stone industry carried on by James Reilly can be gained by a reference to the buildings, the stone for which have been prepared in the yard of James Reilly, viz:

St. Joseph's Church and St. Vinsent's Academy, Wallace place; Wilkinson, Gaddis & Co., Broad and Fair streets; Merchant's Insurance Co., Broad street; Wickliff Street Presbyterian Church, Boston street and Thirteenth avenue, Newark, N. J.; St. John's Church spire, Decker Building, Orange, N. J.; Christ Church, Main street, East Orange, N. J.; New Jersey Central depot, Communipaw, N. J.; U. S. Post Office foundation and Hand Building, Scranton, Pa.; St. Agnes Church, R. C., and St. Mark's Church, Episcopal, Brooklyn, N. Y.; St. Mary's Church, R. C., Poughkeepsie; Aldrich Court, 45 Broadway; Columbia Building,

Broadway and Morris; Morris Building, Broad and Beaver; Clark's Mansion, Ninetieth street and Riverside drive, New York.

Since the death of Mr. James Reilly, the founder, in 1892, the business has been conducted by his son and surviving partner, Mr. Charles Reilly, under the direction of our fellow townsman, Mr. James Moran, the mason builder.



JAMES REILLY, FOUNDER.



VIEW OF REILLY BROS., BLUE STONE WORKS, ON OGDEN NEAR CLAY STREET.

REILLY BROTHERS.

THE reader who carefully turns over the illustrated pages of this work, and notes the brief sketches accompanying the engravings, will at a glance discern that competition and rivalry has in a large degree played an important part in the steady progress of the manufacturing industries of the city. It is met with in all the various interests, and in every department of trade it has encouraged and stimulated inventions and enterprises in private as well as in public business. Honorable competition in business may not be the quickest way to success, but after all is it not the surest, the happiest and the best in the end? In this connection the attention of the business community is called to the illustrations displayed on this page. They convey some idea of the blue stone industry which at the present time attracts the attention of both owners and builders to the unexcelled and admirable durability of this beautiful stone and its adaptability for building purposes. When we consider the amount and various industrial interests for which Newark is noted there are but few which have come to the fore more steadily or with a greater



JOHN E. REILLY,

prestige than the stone trade business. The demand for blue stone material is steadily increasing. Hence it is not surprising that capital is being invested with considerable vim in the quarrying, marketing and finishing of this useful and durable stone for building purposes. The young and energetic firm of Reilly Bros. are practical stone workers, with a thorough knowledge of the industry in all its branches, and are prepared to furnish on reasonable terms at the shortest notice, all kinds of mantels, hearths, sills, steps, chimney caps, coping and every description of trimmed and cut blue stone. They make a specialty of setting and laying of side walks and enrb stones in a workmanship manner and are prompt and reliable in all transactions.



THOMAS REILLY.

VAN STEENBERG & CLARK.

WILLIAM VAN STEENBERG.

MONG the prominent stone dealers of the eity we find none better known than Van Steenberg & Clark, located at the corner

of Ogden and Gonverneur streets. These gentlemen, both of whom have been in the bluestone business all their lives, engaged in the wholesale business at Westbrookville, N. Y., about fifteen years ago. In 1880 they came to Newark and opened a yard on Passaic street, at the foot of Third avenue. Here they remained seven years, when they moved to their present location. In the meantime, by close attention to business, and by fair and honorable dealings, they have won the confidence of their customers. and their business has grown from a small beginning to its present proportions. The average number of men now employed is from thirty to fifty. Bluestone, as a building stone, has of late years gained great favor among the architects and



JACOB CLARK

great strength and durability, together with its beautiful and lasting blue color, it is now extensively used for trimming some of the handsomest buildings being erected. As specialties of this firm's work we mention the following: Prudential Building, including all bluestone in the building and the spacious sidewalk around it; The United States Credit System Building, the Ballantine Building on Market street, Feigenspan's Brewery, Essex County Brewery, Essex County Insane Asylum and Essex County Jail,

builders throughout the country. On account of its

Not only in business circles are these gentlemen well known but in social circles as well. Both are members of the North End Club, Mr. Van Steenberg being a member of the Board of Governors. He also served the city as Alderman for eight years.

WILLIAM H. GOBLE.

IN ALL ages men have endeavored to provide their families with a home. From this desire, perhaps, was created the master mason or builder Many citizens are enagaged in this industry here, prominent among whom is Mr. William H. Goble,



WILLIAM H. GOBLE,

whose photo is given herewith. He has for years been identified with the building industry of Newark, and is a well-known contractor with a large experience in the building line. He is a worthy representative of the fraternity of master builders and the building trades generally, of Newark, where he is favorably known for his industry, integrity and personal worth.

JAMES MORAN

MONG the most useful citizens of a manufacturing com-A munity like Newark, are to be found the mason builders, who ereet the homes, factories, school houses, ehurch edifices, and buildings of every form, which adorn the

streets of the eity, or add to the convenience or comfort of its people. Many able and enterprising men are engaged in this calling, prominent among whom may be mentioned Mr. James Moran, whose photo is herewith given. He is noted among the leading industrial men of Newark and has ever proved himself to be a thoroughly conservative business man.





POWERS & MCGOWAN, FAIRMOUNT STEAM STONE GRANITE WORKS.

POWERS & McGOWAN.

THE above engraving represents the Fairmount steam stone granite works of Powers & McGowan, and is an admirable illustration of what enterprise and business sagacity can accomplish. These enterprising citizens engaged in their present industry thirteen years ago, with little or no credit and a capital so small that it would have hopelessly discouraged anybody not pos-

JOHN E. WESTERVELT.

THE name of John E. Westervelt, whose profile is represented on this page, has long been associated with the sign industry of Newark, he having succeeded to the business established by his



JOHN E. WESTERVELT.

honored father a number of years ago at No. 791 Broad street, where it is still carried on. Mr. Westervelt is a practical mechanic in art of manufacturi ng artistic signs of all kinds, and is among the leading exponents of this art. He is one of the surviving veterans of the late war having served his country with honors in the Twentysixth New Jersey Volunteer Infantry.

sessed of the vim and courage that were characteristic of these mer Success, however, has crowned their efforts, and their entire attention is given to the manufacture and erection of fine marble and granite monuments, head-stones, tablets, statuary, crosses figures and emblematic designs of every description. Estimate furnished upon application at the office of the works, Nos. 46 and 470 South Orange avenue, opposite Fairmount Cemetery Newark, N. J.

CHARLES PFEIL.

CHARLES PFEIL, house, sign and fresco painter, paper hanging and kalsomining, No. 68 Mechanic street, is the enterprising gentleman whose portrait is herewith given; a me

chanie in every sense of the word in the trade he so ably represents. The premises occupied are spacious and commodious. Only skilled workmen are ememployed. A large assortment of the finest wall papers are kept in stock. Mr. Pfeil has attained a reputation for exeellenee of work, and makes a specialty of church decorating.



CHARLES PEEIL.

THE STAR HEELPLATE CO

HE Star Heel Plate Co., (Sacks and Richmond, proprietors), are the leaders of the class of goods as manufactured by them, principally among the list being standards and lasts, combination lasts and heels, stiffeners and plates, at the same time they add a new industry to the city. Their trade extends from the Atlantic to the Pacific, and as a number of articles manufactured by them are covered by patents, it enables them to retain sole control of a valuable line of goods, including the gem or workman's friend, a valuable article for families to repair their own shoes. Their extensive works are located at Nos. 63 and 81 Polk street.



WORKS OF THE STAR HEEL CO., C. TO 'T POLK STREET

FRANK D. PELLO

M. R. FRANK D. PELLO, whose portrait is herewith given, is manager of the Metropolitan Manufacturing Company for this city and State, and is one of the foremost men in the installment business. He is lenient with good customers, but hard on those who try to beat the company. He is a prominent Mason, is a Knight Templar and a Noble of the Mystic Shrine and a member of other social organizations.

FRANK D. PELLO.

CHARLES E. LONG.

M. CHARLES E. LONG, whose photo, is herewith given has for the past quarter of a century been identified with the F. W. Devoe & Co. Varnish Works, of this city, as superintendent. Mr. Long is a veteran of the war for the Union, having served honorably in the 95th New York Volunteers, and is at present a member of Garfield Post, No. 4, G. A. R., Department of New Jersey.



CHARLES E. LONG.

NEWARK EMBROIDERING WORKS.

WILLIAM V. EGBERT & CO.

EW industries carried on in the city of Newark require a greater amount of skill than the work of embroidering. In

some of the samples turned out by II. Bornemann at his Newark Embroidering Works, Nos. 78 to 84 Shipman street, there is a delicacy of pattern and perfection in figure, style and finish which are indeed charming. We are privileged to show an illustration on this page of Newark, N. J., ILLUSTRATED, from which, as a study, many very interesting and instructive facts may be learned, that the reader might otherwise fail to glean from other sources of information.

The industry was established ten years ago and has grown to its present large proportions under the push and vim of its present proprietor, who is also the founder, and few among our great manufacturing concerns have taken better pains than this, to have the very best of mechanics and artisans in their employ, to obtain the latest improved and very best machinery as their help meets, and to turn out a higher grade of products to meet the markets of the world and supply the daily increasing demand for embroidered

goods. Mr. Bornemann has let none of the means pass which he could bring to bear in reaching that desirable end. Among the many classes of goods which may be named as undergoing the metamorphosing process of embroidery there may be mentioned flannels of many grades, velvets, plush, cashmeres, satins and other silk fabrics in many colors, styles and patterns, which space will not permit to mention. Also corner embroidered handkerchiefs in initials or otherwise.



WHILIAM V. EGBERT.



NEWARK EMBROIDERING WORKS, SHIPMAN STREET.

F THE many products of Newark brains and industry, one of the most important is the manufacturing of machinists' and plumbers' supplies. It has so many branches and ramifications that

many branches and ramifications that it offers to a man of a mechanical turn of mind, exceptional opportunities for the discovery and introduction of important improvements.

The house of William V. Egbert & Company has been connected during the past eight years with the manufacturing of machinists' and plumbers' supplies of every description. The house has been a prominent factor in promoting these industrial pursuits since its establishment in 1856. The business has been successfully conducted at Nos. 35 and 37 Mechanic street. A photo of the founder is herewith given. The firm is well-known in the mills, factories and shops of the city, and they have an extensive trade in general supplies.

PATRICK H. CORISH.

N A letter written home by Governor Carteret, in 1680, he said, at Newark is made great quantities

of cider, exceeding (in quality) any we have from New England. Rhode Island, or Long Island." The town was then noted for its excellent cider, and the city is still noted not only for its choice cider, but for the superior quality of its manufactured beverages, or "soft drinks" as they are familiarly termed. Among the numerous mineral water manufacturers, the name of Mr. Patrick H. Corish, is worthy of mention for the delightful, cool and refreshing lemon and cream soda, ginger ale, sarsaparilla, birch, raspberry, pineapple, etc., for which this enterprising citizen has won a well earned fame. The business is conducted at Nos. 36 and 38 Lexington street, where he has erected an admirably equipped and well arranged plant for the successful carrying on of this important branch of industry. The photo of Mr. Corish is here-

with given, and a single glance at which will convince the reflecting that he carries in the lines of his face, that genius and determination which wins the victory in the battle of life, however great the truths to unravel, or obstacles to overcome. His quick comprehension led him early in his career to manufacture nothing but what will bear the test of purity.



PATRICK II. CORISII.

W'M, BROWE & SON.

A T THE top of this page the reader will find beautifully illustrated the interior of the chandelier, gas and electric fixture establishment of William Browe & Son, of No. 36 Bank street, near Halsey street, Newark, N. J. This firm makes a specialty of bronzing and regilding, and contracts for fitting dwellings with electric bells and lights.

HARRY W. SMITH.

HARRY W. SMITH, a photograph of whom appears on this page, belongs to that class of Newark fellow citizens, who are never content to let their life run along in the old rut, but who have brain matter enough to not only conduct a business successfully, but also to take time to delve deep in the channels of information and go searching among the defiles of

the mountains and in the laybrinthian workshops of nature. A look at his electrical conduit or electro magnetic invention to supercede the cumbersome trolley system of propelling street cars will quickly satisfy, that the alchemy of his nature is astir and may yet startle the world. Successful in business, Harry W. Smith now stands at the head of one of Newark's largestmen's furnishing goods, merchandizing and light goods manufacturing establishments, which is located at Nos. 202 and 204 Market street.



INTERIOR VIEW OF WILLIAM BROWE & SON, CHANDELIER, GAS AND ELECTRIC FINIURES, F BANK STREET

MORRIS D. MACKNET.

A MONG the successful and progressive young business men of Newark, Morris D. Macknet is a notable instance. This gentleman has been identified with the steam heating business for some years, and stands at the head of his profession. His handiwork is seen in scores of the leading buildings of this city, for instance, Peddie Memorial and First Congregational Churches, Miner's Theatre, Headley's Trunk Works, and others. He is senior member of the firm of Macknet & Keuily, 17 Clinton street.



HARRY W. SMITH.

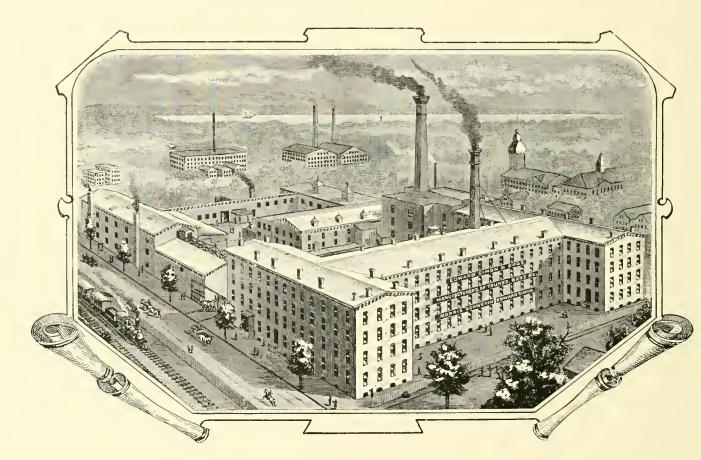


MORRIS D. MACKNET

EDWARD SIMON & BROS.

THIS firm, whose cuts form the illustrations on two pages of this work, was founded thirty-five years ago by Mr. Edward Simon, in a small shop on Market street, with but two workmen. During the war for the Union his business gradually increased through the great amount of contract work turned out for the Government. After the war, his brothers, Samuel and William, became associated with him in business under the firm name of Edward Simon & Bros, opening their factory on Fair street. In 1868 Morris Schwerin became a member of the firm. On account of the increase of the industry the firm, in 1870, built their present plant on St. Francis street, which they have continually increased

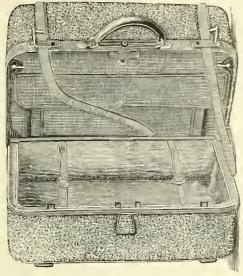
made of the great heaps of lumber trunk slats, which tower in you presence like young mountains. Second, of what use can such at immense variety of materials of all kinds, seen carefully heaped on all sides, be in the work of manufacturing such simple article of comfort or luxury par excellence, as are trunks and bags? And third, how can so much and such a bewildering style, form and shape of machinery be made use of? In answer, it will be said it is the easiest matter in the world, since everything goes like clockwork; method predominates in every move in the conduction of the great concern. At the moment when the signal sounds every operative of the vast swarm is in his place; the saw wheel



until at the present time it occupies thirty city lots, with ten adjoining lots, on which they store their lumber. In 1885 Samuel and William Simon withdrew from the firm, and were succeeded by Morris Schwerin and Edward Simon. In 1890 Edward Simon died, and since that time the business has been carried on solely by Morris Schwerin. The firm manufactures everything in the trunk and bag line, such as frames, clamps, locks, hinges, etc., and also do all their nickel, gold and silver plating. Their business is very extensive, shipping goods to all parts of the United States, the great South American Republics, Spanish and British possessions, and even to the cities of Europe, where they prefer American goods to those manufactured at home.

The firm has been awarded gold medals at the Vienna Exposition in 1873, and the Paris Exposition in 1878, and several premiums at the Centennial Exposition. They also manufacture their own trunk boxes, their plant being one of the largest in the line. A visit to the plant of this great manufacturing concern is full of interest. First, you will wonder what disposition can be

its way through the board like lightning; the planer sputters it way along the length of the rough slat, and from bench to bench the form moves on, from hand to hand, till the finished trunk o bag is in readiness for packing or shipment. As the numbers of finished bags and trunks take their alloted place which the skilled packers know so well where to find, and they always have room for another and another, as in almost endless succession the making, finishing, packing and carting away goes on, the latte accomplished on huge vans, where hundreds, yes thousands, go out daily, piled high behind the patient horses, which, with the ever busy drivers, shippers and handlers start them away to the railways and steamboats on the first stage of their journey to the busy commercial marts of the world. What to the novice would appear, as the van with its towering load moves by, as a single trunk or bag, may be but one of a "nest" of a dozen or more graded in size from the grandest, huge Saratoga, filled with com fortable apartments, (with rooms to let) along down to the wee little boxy of a trunk, in which to pack the dolls, fine fixins', et



TRAVELING BAG,

In looking over the finished products as they enter the packing department, where the higher grades are carefully covered with a coarse but soft grade of cloth, to guard against the almost inevitable certainty of destructive marring of the costly leathers with which they are covered, during their transportation to distant places of sale and consumption, the wonder grows as to how it is possible to reach such a rich consummation of results as are so fully demonstrated to follow the track of this industry as carried on in this great concern of Edward Simon & Bros,

In timber growing sections of the country, and where sawing mills abound, there are found those which make a specialty of trunk slats, which such great trunk manufacturing establishments as this of Edward Simon & Bros. use so largely as to make the supplying of these simple parts a business in itself, yet very indispensable necessities are these to the conduct of the work of trunk making. Although not deeply interested, yet a by-stander, as he sees the great loads of these slats in the rough, passing into the yards of the company, will be set to thinking where they all come from, as the line of drays and carts, unbroken, moves on. So with the lumber, which goes into the naked boxes or frames, some of which is sawed thin to meet the want in the forest mills, while the larger proportion goes through the sawers and planers in the factory. The call is not alone on the timber land but the mines of our Northern New Jersey, where the iron ore has been pocketed away for centuries, must be called upon for her contribution in the cords of hooping materials to keep the parts

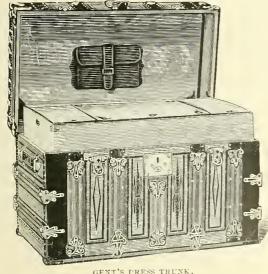


LADIES' SHOFFING FAG.

together, as also for locks, hinges and nails and multiplicity of other uses to which the iron of the country is applied.

Not yet satisfied are the gormandizing propensities of this great industry, but some of the more than three score tanneries which have their homes, housing and yards in Newark, must be called upon to supply their share of the material, or else there could not, nor would not, be any of the more finished, richer and costlier outputs of the trunk industry carried on. The leather to cover and beautify the larger proportion of the better grades of trunks must be forthcoming, and then to be utilized it must pass through the wonderful splitting machines and feel the delicate touches of the embosser, which leaves its artistic evidences where they may be seen and admired as marvellous samples of the handiwork of genius. Not yet has there enough passed in the kaleidoscope of material necessary for the trunk's completion, but the brass worker and tack maker must join the procession to complete the line of march in the endless run which the raw material takes in making the journey through all the manipulations in the great Simon trunk manufacturing concern, before reaching its ultima thule in the finished trunk productions, and goes forth to supply the growing demand of the merchant, salesman and consumer.

The wonderful success which has followed close upon the conduct of this great trunk and bag manufacturing business is due entirely, since the death of Mr. Simon, to Morris Schwerin. whose genius and tact is everywhere manifest. Large quantities of the trunks and bags which are the output of Mr. Schwerin's factories, go to the great stores at No. 543 Broadway, New York, where he keeps employed a large corps of salesmen and clerks, busy supplying the trade of the world.



GENT'S PRESS TRUNK



SOLE LEATHER TRUNK

WILLIAM O. HEADLEY & SON.

In FEW, indeed, of the illustrations which make this book an art as well as business treasure, has the artist's pencil, supplemented by the graver's tool, brought out for its pages a more truthful representation of any one among the thousands of Newark's diversified industrial establishments, than in the beautiful pen sketch here seen of the great brick structures in which is housed the trunk and bag manufacturing industry of William O. Headley & Son.

This property passed into the hands of the present owners and occupants some three years ago, the quarters which they then occupied, and which had been the home of the industry for more than a quarter of a century, becoming all too contracted for the rapidly expanding business of the firm of William O. Headley & Son. They must needs have more enlarged quarters to meet the growing demand for the popular brand of goods which they manufactured. After the purchase was made by Mr. Albert O. Headley, the present sole proprietor, an immediate renovation and improvement of the old building took place, and an immense new factory building, \$0x150, and six stories above ground, with extensive basements and attics, was erected. When all was finished and the great buildings furnished with all the latest and

best approved machinery and appliances for the making of trunks and bags, and the entire paraphernalia of the old establishment, which was the result of a more than thirty years' ingathering by the founder of the industry, William O. Headley, now deceased, who was a connoisseur, indeed, in all the machines and appliances which had a tendency to speed the work and add to the quality, beauty and utility of the trunk and bag industry, was removed to the new home, only a few

yards away, but over the old familiar Passaic, which had flowed by the east windows of the old building, on its way to the ocean and back again, and which would now flow by the west windows of the new Headley factory, in its endless round of ebb and flow. Everything being in readiness, with steam up in the great boilers. made by Lyons & Co., of Newark, and the engine, of one hundred horse power, also of Newark make, the engineer and firemen, and the more than three hundred of skilled operatives, laborers, boys and girls, packers and shippers, are in place when the word is given, and the great engine, like a thing of life, moves off on its endless round of ruthless toil, and the great industry of trunk and bag making, peerless in many respects, and with few parallels in the industrial world, is again under way and turning out more than a quarter of a million trunks and finished bags every year, and taking their place in the rapidly flowing streams of supply to keep full the great occan of demand, and yet never gorging the

Few are they who have in the hurry and scurry of business, or even of those who live a life of pleasure, ever taken a moment to consider the industry of trunk and bag making, its magnitude and bearings, and its great influence on the growth and prosperity of the city of Newark. The reader of the facts recorded on this page, devoted to the trunk and bag industry of Newark in general, and of the manufacturing firm of William O. Headley & Son, (Albert O. Headley), engaged therein, in particular, will doubtless awaken to the fact that the trunk and bag industry forms a very important integral part in its manufacturing greatness,

since he will find by a cursory examination only, that there are nearly a score of factories in the city of Newark where trunks and bags are made, of which at least one-half are great concerns already, and all the rest healthy and growing.

A few hours cannot be more pleasantly, and we may safely say, more instructively or advantageously spent than while engaged in a tour of inspection through the great rooms in which the trunks and bags are made and wherein is placed such an interminable maze of machinery, belts and pulleys, as to keep him on the lookout for his leader and explainer, and out of reach of danger, which seems so suspiciously near on all sides and quite menacing. The great variety and immensity of the number of processes through which the material is made to pass during the various stages which lead up to the perfected trunk or bag, are bewildering indeed, to the novice. As the expert or one that is thoroughly acquainted with or seasoned to the business, who is chaperoning the visitor (for none other is permitted to act in such a responsible place) is smiling over our manifestly evident timidity, is fearless amid the rattle of saws and planers, the bang of hammer, the fly of pulleys, or ply of belt, so thick all about us, and so carelessly are they responding to the touch of the great

steam engine dispensing its power with might and main in its work of assisting the deft fingers of the mechanics engaged in the work of converting the raw materials used in the factory for the upbuilding of the finished trunk or traveling bag.

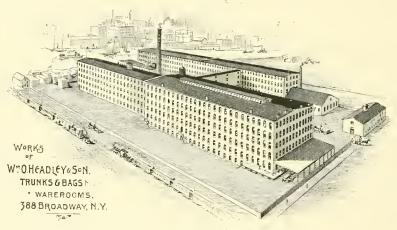
Looking at the trunk and traveling bag industries from the standpoint of to-day, the mighty changes which have been wrought would prove startling indeed, to those who have never given a thought to this particular branch of Newark's man-

branch of Newark's manifold manufacturing pursuits. In the good old days of the long, long ago, the trunk was made by the individual, and a finished production was turned out as the workmanship of a single pair of educated hands. All the parts were manufactured on the spot.

In this branch, like all the others, the changes have been the result of steady progress toward which the increasing demand for a greater supply must needs be made to meet.

For their efforts in the upholding of Newark's reputation, and for the material aid which Mr. Albert O. Headley (William O. Headley & Son) has given, and the marvellous degree of influence which this house has brought to bear in the upbuilding of her manufacturing greatness, too much credit cannot be awarded.

Ever with an eye single to her greatness as a manufacturing centre, has this house watched every move in the industrial trend. Without these men, men who have ever been ready to defend the honor, growth and prosperity of the city of the home of their industry, and in which they have risked capital and personal repute, Newark never could have occupied the proud and leading position among the industrial centres of the world that she does to-day. All honor then to the trunk and bag makers, and the representative men generally, who stand at the head of the many other leading industries which have had their homes and housings erected here through their choice and influence, and may they go on for years in their successful way, adding new lustre to their own names and securing that competence which is ever due to the men of good judgment who have the push and vim, and who never falter in the face of difficulties.



RAILROAD TRANSPORTATION

As THE hardy old New Englanders pushed their shallops and flat boats up the Passaic and rested on their oars at the point where now the great Pennsylvania railroad draw-bridge spans its waters, little thought they that such mighty improvements as now, not only mark the spot, but extend in almost unbroken lines for miles and miles in all directions, would greet the future. As they doled out in the sternest sense of honor the quid pro quo to the Indian for the lands purchased, and when they constructed their first rude homes, they little thought of the magnificence to follow, but like many another they built better than they knew. Every appearance indicates that in laying out the wide and beautiful streets, and in zealously guarding the

passengers only), wheeling the wealth of continents and the people of nations to and fro, conferring speed and safety to the former with the addition of comfort to the latter. More than a dozen depots or station houses are scattered all over the city, where the trains stop and start, passengers arrive and depart, giving the very amplest of accommodation to everybody desiring to go or come.

The old Market street station which was long an eye-sore to Newark's sojourner or traveler, went the way of that at Centre street and like that, a new, attractive, capacious and comfortable building took its place. Our artist has given a striking picture of the same, which we know will be scanned with interest and satisfaction, as it appears in all its architectural beauty and finish as will also the elegant, large and comfortable waiting room



EXTERIOR VIEW OF MARKET STREET STATION, PENNSYLVANIA RAILROAD.

open parks, there must have been an utter abnegation of self, and the exhibition of such a marvelous care and forethought for the good of others, that they must have had something of a forecast of the future. It really seems that they must have felt that the foundations of their infant city were being laid in very convenient, as well as pleasant places, as few cities of the Western Continent are so fortunately situated as Newark, to get into or get out of. Her situation on the highway of land, commerce and travel, at the wide open door of the commercial emporium of the great open sea and just in the way of the untold wealth of the Pennsylvania and New Jersey mines, rich in coal and iron, have tended mightily to her upbuilding, and has made it necessary that six great railroads should pass through her streets and by her doors, five of which are trunk lines over which nearly a thousand trains ply daily (three hundred and fifty of which earry

thereof which appears on the opposite page both of which have been reproduced from pictures taken by our well-known fellow townsman, J. Rennie Smith, whose ability in the art of photographing is unsurpassed. The company have also provided for the safety and comfort of the traveling public by a tunnel connecting the main depot with the passenger station which does away with the necessity of crossing the tracks.

The truly beneficient character of the great steam roads is seen in the one fact that thousands who do business in New York have their homes, and rear and educate their families in Newark, where they can have the advantages of cheap rents, low taxes, invigorating air and pure mountain spring water. But little more than a half hour of time is consumed in the passage to and from.

Through many of the streets are already running the swift,

safe and capacious electric cars, which have taken the place of old tramway horse cars, speed and comfort superceeding the slow plodding and tiresome horse locomotion. Frogress is the word. Not alone do the electric cars bring benizens of comfort to Newark, but the outlying suburban towns and growing young cities as well. Long before Newark N. J., Illustrated, in all its beauty and attractiveness shall have been fully read and enjoyed, such an absolute institution as the once favorite old horse cars will be things of the past and even ancient Belleville and royal blue South Orange will have been waked from their lethargy and be ready to repeat, "Progress" is the word.

The State of New Jersey has reason to be proud of the Pennsylvania railroad. The broad corporation arms of "advance and improvement" have reached out in all directions, clasping tional facilities for our city. Newark's position as a city is enviable. She is so close to the new world's great metropolis that the market pulsations of the world are under her finger, and she can count their irregular beating, and through the medium of the Pennsylvania Railroad's New York Division, her inhabitants can at the shortest notice take a train that runs through or connects for any point in the States. Think of occupying the position at one of the main terminals of a railroad whose rails if laid end to end would put a girdle of steel around the earth; whose coaches, cars and locomotives in daily use East of Pittsburg alone would reach from Newark to Philadelphia and thence to Lancaster and back again; a line whose yearly gross earnings in Pennsylvania State alone amount to \$30 for every man, woman and child; whose length of line operated aggregates 12,000 miles of track



INTERIOR VIEW OF MARKET STREET STATION, PENNSYLVANIA RAILROAD.

the State of New Jersey in an affectionate embrace, aiding her in the development of her natural charms and supplying her with the greatest railroad highway in the world. The far corners of this State, in olden times, were a week's journey apart. Now, through the enterprise of this line of steel, they are less than a day. The produce of the farm, the product of the manufacturer and commodity of the merchant are taken up at their doors and conveyed to the thresholds of those who need them.

It is impossible, in the limits of a brief review, to discuss satisfactorily all the potentialties that are operating on behalf of the continued progression of Newark in trade manufactures and population, but that its exceptional transportation facilities have much to do with it, is a self evident fact. The marvelous improvements made in Newark from a railroad standpoint speak eloquently for themselves, yet it is but the beginning of addi-

built in the best manner, and being constantly improved under the ceaseless efforts of the operating department; whose engines are a synonym of stength and power, speed and safety; whose cars are palaces on wheels, embodying luxury and strength; whose trains are under the protection of the finest appliances to insure safety known to modern railroad science; whose admirable passenger service is patronized to the extent of carrying over 75,000,000 passengers per year; whose freight cars transport more than 122,000,000 tons of freight (more than that carried by the entire Merchant Marine of Great Britain) per annum; whose management has surprised the world and earned the plaudits of the traveler, by providing the finest in appointment, swiftest and best passenger train on the earth, the "World's Greatest Passenger Train," the "Penusylvania Limited." And Newark throbs with the growth of prosperity.



INTERIOR VIEW OF THE LADIES' WAITING ROOM, MARKET STREET STATION OF THE PENNSYLVANIA RAILROAD.

B. COURLAENDER, JR.

In NEWARK business circles are to be found many able, progressive and farsighted men, but few more so than Mr. B. Courlaender, Jr., the able representative in this city, of the Pennsylvania Railroad. Mr. Courlaender is the passenger agent of the Long Branch District of the Pennsylvania system, which comprises all portions of New Jersey North of the Camden and Atlantic Railroad, with the exception of Jersey City, Hoboken and a few stations on the line of the West Shore Railroad, and all reports of passenger business within his district are made to him. His office is in Newark, at the corner of Broad and Market streets, and it is the recognized headquarters in this city for information regarding railroad matters. Mr. Courlaender is a thorough railroad man in every sense of the word, devoted to the interests of the company he represents and extremely popular in in business circles generally.

JAMES R. SMITH.

THERE are but few citizens in Newark engaged in the industrial pursuits who are more highly esteemed for their attention to duty, than our fellow townsman, Mr. James R. Smith, a photo of whom is herewith given. For more than half a century this energetic citizen has been connected with the railroad business in various positions, and at present is supervisor of section B of the Pennsylvania railroad. Along the ever busy steel highway of the grand old "Pennsy," from New Brunswick to Jersey City, there are employed many old grey haired veterans, of the war for the Union, into whose homes Mr. Smith has sent a ray of sunshine. For several years he has been highly complimented by his superior officers, for the admirable and unrivaled condition in which the section of roadbed under his supervision is kept, thus maintaining the industrial reputation for which the citizens of Newark have been noted.



B. COURLAENDER, JR.



JAMES R. SMITH.

CENTRAL RAILROAD COMPANY OF NEW JERSEY.

A S EARLY as 1863, a movement was started to build a road from Newark to Jersey City. A committee was appointed to promote the movement, among the most active of whom were Isaac Pomeroy, John McGregor, Philetus W. Vail, Thomas Agens and J. E. Gaul.

Early in 1864 an organization was formed by the election of Isaac Pomeroy as president and J. E. Gaul as secretary. Stremous efforts were now put forth, and the committee succeeded in interesting nearly all the business men in the central portion of the city, and their numbers grew until over 150 were enrolled. The Legislature was petitioned, and in 1866 the charter was

granted, being approved March 1. Courtland Parker, Esq., represented the committee before the Legislative Committee on Railroads as counsel, and J. M. Scovel, then President of the Senate, lent valuable assistance in pushing the bill through.

The incorporators, as named by the charter, were the Messrs. Cornelius Walsh, A. Hardenburgh, John McGregor, Theodore P. Howell, Edgar B. Wakeman, Job Falkenbergh, John Hall, Theodore Runyon, Benjamin C. Miller, G. Van-Horn, Robert L. Smith, William Keeney, Isaac Pomeroy, Adolph Schalk, Philetus W. Vail, James W. Durand, Daniel Demorest and George D. Woodruff, all of whom had been more or less active in interesting the people in the project and in keeping it prominently before the Legislature, and in securing its passage. Supplements to the charter were passed in 1867, 1870 and 1871. Immediately after the granting of the charter, a permanent organization was formed by the election of Hon. John McGregor president, which position he held until the road formally passed into the hands of the New Jersey Cen-

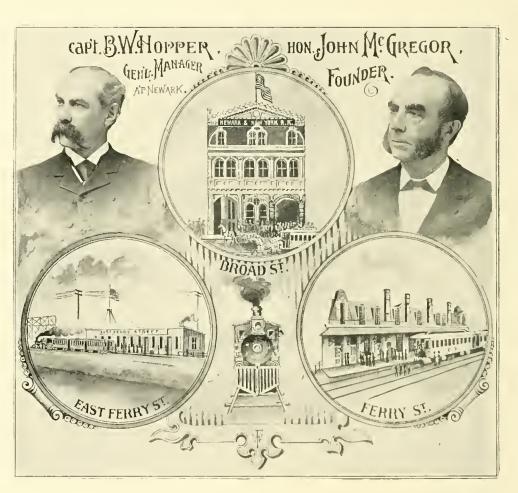
tral Company. The road was opened on July 23, 1869, though the regular running of trains was not commenced until August 2, when the first schedule took effect with twenty-nine trains each way daily, the first leaving Newark and New York simultaneously at 5.45 A. M., and the last at 11.45 P. M. Within a short time numerous changes were made in the lunning of trains in order to meet the wants of patrons.

The popularity of this line to New York will be noticed from the fact that beside the trains being enlarged, their number has increased to forty-six each way daily, and in addition thirteen trains each way daily are run between West Side Avenue (West Bergen) and New York.

The Elizabeth branch, which connects Elizabeth and Newark, was opened in 1872, and over this thirty trains each way daily are run, connecting at Elizabethport for Perth Amboy, South Amboy, Matawan, Freehold, Keyport, Red Bank, Long Branch, Ocean Grove, Sea Girt, Lakewood, Manchester, Whitings and Atlantic

City; and at Elizabeth for Plainfield, Dunellen, Somerville Flemington, White House, Lake Hopatcong, Easton, Allentown, Mauch Chunk, &c., and at Bound Brook for Trenton and Philadelphia, and all points on the Philadelphia & Reading Railroad.

Although not intended at its inception for a freight road, it was found necessary to embrace this traffic also, and its success in this line is demonstrated by the extension of its tracks and other facilities to enable it to handle this steadily increasing traffic. A branch has been laid from Brill's Junction to the manufactories along the Passaic River, in the lower part of the city, connecting with the works of the New Jersey Zinc and Iron Works, B. Atha



& Illingworth Steel Works, Lister's Chemical Works, Mapes Co. Works, etc., along the line of this branch at Plank Road a large delivery yard is located, tracks have been laid to Butterworth and Judson's works, to The Heller & Merz Co.'s works, and a delivery yard at St. Charles street, near the East Ferry street depot. A receiving and delivery yard running from Mulberry street to Ward street, has been opened with entrance from both Mulberry and Lawrence streets, which compares favorably with any yard in the city. Freight is received from and forwarded to every part of the United States and Canada, from Maine to California, and no pains are spared to expedite its movements or accommodate its patrons.

The Central Railroad Company of New Jersey was formed in 1849, by the consolidation of the Elizabethtown and Somerville Railroad Co., and the Somerville and Easton Railroad Co., and extended from Elizabethport to White House, and having a steam hoat connection between Elizabethport and New York, carrying both freight and passengers. In 1852 the line was

extended from White House to Easton and in 1864, from Elizabethport to Jersey City. It has since acquired control of the Lehigh and Susquehanna road from Easton to Scranton, the New Jersey Southern road from Sandy Hook to Bay Side, the Free hold and New York road from Freehold to Atlantic Highlands, besides several shorter, though important lines and has always been a favorite road with the traveling public. In connection with the Philadelphia and Reading and Baltimore and Ohio railroads it runs the Royal Blue Line, the fastest train between New York and Washington. It also operates in connection with the Pennsylvania railroad, the New York and Long Branch railroad.

Austen H. McGregor, a photo of whom is herewith given, is one of the youngest men at the head of a great mercantile establishment in the State of New Jersey. He was born in Newark, being the only son of the late Judge John McGregor. After completing his educational studies, he entered the clothing business in Newark as the junior member of the firm of McGregor & Co., and on the death of the senior, became the head of that large establishment. Aside from the business under his immediate management, Mr. McGregor has identified himself with the material progress of his native city, and is a stockholder and otherwise interested in some of the most successful mechanical and financial institutions of the city, as well as taking an active part in the political and social affairs of the State.

Captain Hopper is a Jerseyman, having first seen the light of day away up in Bergen county, on the 15th of May, 1830, and is a Newarker by choice and adoption. He began his business career in Newark in 1858, but when he heard the clarion call, like all other true patriots, he was ready to offer his life in his country's cause. In 1851 he buckled on his sword, and as captain in the 9th New Jersey Volunteers, he fought her battles till the close of the war in 1865. He was then appointed as ticket agent for the Central Railroad Company, at Liberty street, New York. He was then transferred, and for awhile was an extremely popular passenger conductor on the Allentown line, from New York to Harrisburgh. In 1869 he was appointed general agent of the company at Newark. For nearly a quarter of a century he has filled this position with credit to himself and satisfaction to the company.



AUSTEN H. M'GREGOR.



S. M. WILLIAMS, VICE-PRESIDENT, CENTRAL R. R. OF N. J.

Mr. S. M. Williams, vice-president of the Central Railroad of New Jersey and the Lehigh and Wilkesbarre Coal Co., though born in New York city, has been a resident of New Jersey for the past twenty years, locating in Roselle in 1872, and may be claimed as a Jerseyman, as his father was born in Sussex county. He began his railroad career in 1865, taking charge of what is now known as the Rumford Fall and Buckfield railroad, in the State of Maine, in the interest of New York capitalists, who acquired control of the property. After re-organizing the above railroad be returned to New York and was, until 1881, auditor of the Lehigh and Wilkesbarre Coal Co., establishing the coal depots in this city, so ably represented by our fellow townsman, Col. J. E. Fleming. In 1881, Mr. Williams was appointed anditor of the Central Railroad of New Jersey. In 1882, when the road was first leased to the Philadelphia and Reading Co., he was appointed by Franklin E. Gowan, then president of that company, as assistant comptroller in charge of the lines leased from the Central company. He became prominently known throughout the State in the celebrated suit of Dinsmore against the Reading Company to annul the lease of the Central property, and the Yail suit brought for the same purpose, being an important witness in both of these cases as well as in the suit of the Reading against the State of New Jersey, growing out of the tax law of 1884, in all of which his ability and thorough knowledge of railroad matters in general were demonstrated.

In 1887, when the Central resumed possession of its properties, Mr. Williams was appointed secretary to the receiver and controller, managing its affairs during the receivership, and when the company was re-organized in 1888, continued in the service of the company as controller, until the lease of the road to the Port Reading railroad, in the early part of 1892, when he was appointed vice-president of that company, continuing in the discharge of his duties as such, until the courts of New Jersey set aside the lease of the Port Reading Company and directed the Central management to resume control of and operate its own properties, when he was elected vice-president of the Central Railroad of New Jersey and the Lehigh and Wilkesbarre Coal Co., both of which positions he now occupies.

MERCHANTS' EXPRESS.

OR a few years, prior to eighteen hundred and seventy, this now great and popular institution had been run in a small way, and did not show even an inkling of what it should be in the future, and it might have continued on its same old rutty way, had not young Charles B. Matthews mightily risked his entire capital and bought out the concern. Mr. Mathews' friends, (and he had many at that early day, for he was a decided friend winner even then, at twenty), thought it a great venture for one so very young to hazard his all. Time has told, in this case as in many another, who was right and who was wrong, presenting but another demonstration of the truthfulness of the old adage, "nothing ventured, nothing had." With the concern, consisting of three horses and desk privileges and signs on his hands, Charles B. Matthews threw his business banner to the breeze, with a fixed determination to win the fight, and won it he has, in handsome

style. The Merchant's express had been conducted up to this time as a sort of Castle Garden tender and baggage delivery, and had headquarters in Newark and in Church street, near William and at No. 167 Washington street, New York. As its founders had the assumption to name it "The Merchants' Express," Mr. Mathews was not long in determining that in his hands it should right early have a fame worthy its honorable name. That he meant every word of his declaration has abundant proof in the growth of business and its magnificent results. At the end of his first five years he is found with twenty horses, comfortably stalled on New Jersey Railroad avenue in his own capacious stables, all of which are in constant use. The great trucks of the Merchants' Express are rattling over the stony streets and working along through the middy lanes, called streets, here, there and everywhere. The marvellous business tact of Mr. Mathews, and his



CHARLES B. MATHEWS,



OFFICE AND YARDS OF THE MERCHANTS' EXPRESS, NO. 44 OLIVER STREET.

pleasant affable ways kept up the friend-making business at a rapid rate, and as the popularity of the Merchants' kept even pace, its capacity must needs be enlarged, and we find him at this present, 1893, with seventy-five horses, and a great steam lighter with all the other necessary paraphernalia for carrying on the great express and transfer business of the merchants. Thus has Charley Merchant, as his intimates delight to call him in honor of his pet institution, which by his energy, perseverance and excellent management he has kept at the head of the line of Newark's progressive institutions, and adding some fresh laurels almost every year to his growing wreath. In 1886, he became the agent for the great Sunset Route of the Southern Pacific Railroad tohandle their freight, and to do the collecting at the Newark end of the line. In 1888, he added to his list, Mallery's Galveston and Texas Steamship Line; the Ocean Steamship Company and Central Railroad of Georgia, as also the Virginia, Tennesee and Georgia Air Line, via Norfolk, Va., and The Clyde Steamship Company; New York, Charleston and Florida Lines, all of which he continues to represent at this time, transferring the freights of the merchants and the output of Newark's great manufacturing establishments to the Erie and the several other railroad depots with his huge drays and vans. To the steamship with his commodious steam lighter, he carries machinery and heavy merchandise. without cost to the shippers his quid pro quo coming from the great transportation companies he is representing. While Mr. Mathews still is a very busy man and keeps an oversight of his immense business, yet, he has eased up very materially from the mighty wrestle and rough and ready willing hand methods he practiced in "ve olden days" when his business was young.

The artist who made the sketch, from which the illustration above was taken, was manifestly a man of genius, with such wonderful accuracy of outline and detail has he executed the work. Furthermore he made light the skill necessary to make the plate from, which it was transferred to this page of Newark, N. J., ILLUSTRATED. The very excellent and life-like photo of Mr. Mathews seen here, needs no qualification at our hand, any one who has ever seen Mr. Mathews will recognize his genial face at once and will catch the expression which speaks so plainly the word "push." A friendly call in his pleasant office at No. 44 Oliver street, will find him not unwilling to give a few minutes time to your service.



THEODORE T. LAWSHE.

LAWSHE'S NEWARK AND NEW YORK EXPRESS.

THE express business of the city is one of the utmost importance. Messrs. Lawshe's Newark and New York express is one of the oldest in Newark, which has, during its existence of twenty-eight years, become popular and achieved a most gratifying success under the untiring and efficient management of the proprietors, whose portraits form the illustrations on this page. These enterprising Newarkers have a large number of substantial wagons and some of the finest draught horses in the city. Regular trips are made each day between this city and New York and a large business is conducted by the firm, who employ none but careful and reliable drivers. Manufactured goods and mer-



LEWIS II, TAWSHE

chandise of every description are received at their offices or called for and delivered in all sections of the city and country. They receive and send goods and merchandise to all parts of the world through their connections with other reliable lines.

MOONEY'S EXPRESS

READERS of Newark, N. J. Lett struted will turn many pages without striking one where the artist has brought a representation of a business in finer detail or more clearly defined lines, than on this where the Newark and New York express of the Mooney's is seen. This illustration speaks a language which cannot be misunderstood.



OFFICE AND STABLES OF MOONEY'S NEWARK AND NEW YORK EXPRESS.



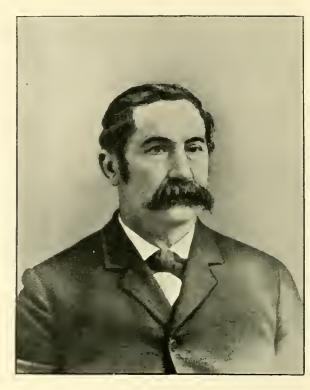
G. A. HALL, PRESIDENT OF THE CONSOLIDATED EXPRESS.



F ANY farther evidence was wanted of the fact that it needed a man who possessed the requisite amount of vim and pluck, and who carried just such a level head as George A. Hall to bring the three or four weakling express companies out of the drag, it can be found in the marvellous success which has attended the career of the Consolidated Express Company into which he ingeniously combined all their interests, forcing, as it were, strength out of weakness, success out of failure, and rejoicing the hearts of the honest men who toiled, but did not win. Out of this comprehension grew the consolidation, and on the first day of July, 1875, the combine was affected and the Consolidated Express Company, of Newark, N. J., was incorporated, and flung a new banner to the breeze, with the names of G. A. Hall, as president, Park Burnett, Jr., as secretary and treasurer, inscribed thereon. Twice a day their line plied between their Newark offices at 1512 Fair street, and their New York offices, at Nos. 45 Church street and 312 Canal street. It will need but a glance of the eye of the physiognomist to see in the very excellent photo of Mr. Hall on this page the visage of a man of business.

ARTHUR ZIPF.

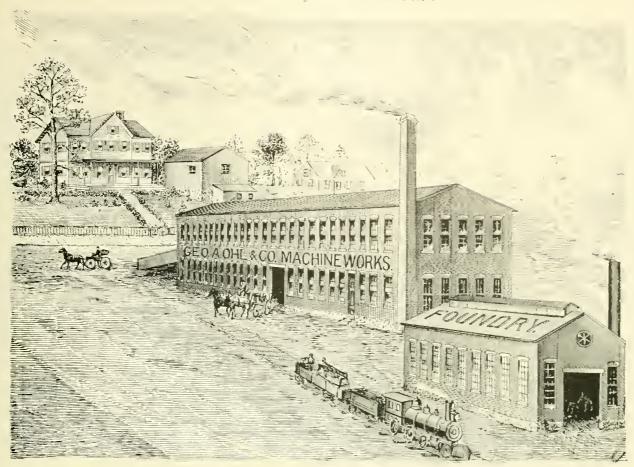
POR more than a quarter of a century Mr. Arthur Zipf has conducted a general wagon manufacturing, repairing and horse shoeing industrial establishment at Nos. 60 to 62 Bowery, corner of Oxford streets, where he has built a prosperous trade by doing the right thing at the right time, always keeping his word and making some of the best wagons ever turned out. When a shoe is put on a horse in his shop, it is put on to stay. That those who have not the pleasure of knowing Ex-Alderman Zipf, as he is now familiarly called, personally, our artist has transferred his photo to these pages. It is a speaking likeness, indeed, and shows the manner of man he is. While keeping a close eye on his business and watching the progress of the wagons, upbuilding, from the smoothing of the timber, which must always be the toughest and most elastic, to the finishing touches of the painter's brush, he has still been able to find time to represent the people of his ward in



ARIHUR ZIPF.

the Common Council in a most acceptable manner, and is highly respected by all who know him, as a progressive and good citizer and a self-made man, who is a credit to the city of Newark, an especially to the particular branch of industry in which he is a largely interested. The output of Newark's shops and factoric are justly celebrated the world over, not only for the fine qualit of the work done, but for the stering merit of the goods as well and it is just such men as ex-Alderman Zipf, who turn on nothing but good, honest work, that have been the means of gaining us such an enviable reputation as a manufacturing community. The business with which he is so thoroughly identified that of wagon building, is one that is necessary to the busines of any large city, and affords ample scope for the gaining of high reputation, and Mr. Zipf has become justly celebrated of account of the excellence of his work.





MACHINE WORKS OF GEORGE A. OHL & CO., NOS, 157-1/1 ORATON STREET.

GEORGE A. OHL & CO.

EORGE A. OHL, was born in Hessen-Darmstadt, Germany, on May 18, 1839, and came to America in 1854. and entered at once upon his apprenticeship as a machinist, with the Van Clief Locomotive Works, Trenton, N. J. In the latter part of 1859, he was engaged by the Newark Machine Company in the manufacture of the Ericsson caloric engine, the Seth Boyden hat machinery and the Ball cracker baking machinery. On April 1, 1861, Mr. Ohl connected himself with the Hewes & Phillips Iron Works, this company having the contract from the State of New Jersey for transforming 30,000 fiint lock muskets into breech loaders. These guns were designed for and used by the New Jersey soldiers in the late war of the rebellion. In 1864 Mr. Ohl took charge of the tool department of the same concern, remaining in this position until the death of the late well-known Joseph L. Hewes, October, 1873. Shortly after the death of Mr. Hewes, he established business under the firm name of George A. Ohl & Co., for the manufacture of tools and special machinery. So rapidly did the business increase that in 1879 the firm was compelled to build the large brick shop on Passaic street, adjoining the D. L. & W. Railroad, where the business of making tools and special machinery was continued On October 12, 1854, the partnership as then constituted, expired by limitation. Mr. Ohl continued the business under the old name of George A. Ohl & Co., he being the sole proprietor. His shop was then located on the corner of James and Essex streets, where the business was successfully continued for five years.

In 1890, the business was incorporated with a capital of \$100,000, Mr. Ohl being president and manager. Immediately after incorporation, arrangements were made for the erection of the present large plant, forming the illustration, at 157-161

Oraton street, which was started, completed and occupied May 1. 1890. At this writing the business of George A. Ohl & Co., is taxed to its fullest capacity, in the production of sheet metal workers' tools and special machinery, designed and patented by George A. Ohl.

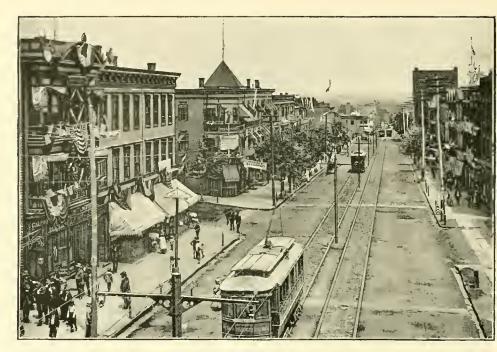


GFERGI A OHI

NEWARK'S STREET CAR SERVICE

THE street railway system of the city of Newark and its vicinity has been a regular growth during more than thirty years. It has passed through the usual vicissitudes and has now reached a position from which it can be developed and extended in all directions, from Newark as a centre, to meet all the needs of the great population which is to occupy the territory from the Passaic river to the Orange mountains.

The earliest charter granted for any horse railroad actually constructed in this territory, was that of the Orange and Newark Horse Car Railroad Company, passed March 15, 1859. Others had been granted for roads to Springfield, Belleville and Bloomfield, some years before, but no action had been taken under them. In 1859, the street railroads had been successfully put in operation in Philadelphia, and parties from that city



VIEW ON SPRINGFIELD AVENUE SHOWING ELECTRIC CARS.

took up the enterprise of connecting Newark and Orange. In March, 1860, charters were granted for the Belleville, Newark and Broad Street Horse-car Railroad Companies. These three charters were such as to lead to a conflict of powers and to throw obstacles in the way of any uniform system of street travel between Newark and its suburbs. In the same year, 1860, a charter was granted for the Newark and Clinton Horse Railroad Company. In the following year, 1861, the charters of the Newark and South Orange Horse-car Railroad Company and the Newark and Irvington Horse-car Railroad Company were granted, and in 1863, another charter was granted for South Orange, and in 1867 for Bloomfield and Montclair, the latter charters containing power to connect with and run over the city roads to Market street depot upon terms to be agreed on. The Orange and Newark line was first constructed under many discouragements. The Broad street line was soon begun, and finally the Orange, Belleville and Broad street lines were practically merged and passed under one control. This consolidation, under the name or the Orange and Newark Horse-car Rail road Company, afterwards passed into the control of the Pennsylvania Railroad Company which owned a majority of its stock Meanwhile the road to Irvington through Clinton avenue had been built and operated, but was afterwards abandoned. And the



THOMAS C. BARR, PRESIDENT N. J. TRACTION CO.

lines to Bloomfield and to Irvington, by Springfield avenue, and also the Newark, Harrison and Kearny line had been constructed, and being dependent on the Orange and Newark for access to the railroad depots they were found to be unprofitable. The Harrison line was abandoned and the Bloomfield and Irvington lines changed ownership under fore closure more than once, until they passed into the hands of a few enter prising men, who placed them both under the charge of Mr. S. S. Battir as president. In 1884, a complete change took place, which was in fac the foundation of the success of the entire system. It was evident tha in order to make any of the roads profitable the three separate organiza tions must be consolidated and put under one control. Accordingly, in 1884, the parties interested in the Bloomfield and Irvington roads pur chased the holdings of the Pennsylvania Railroad Company in the Orange and Newark company, and thus obtained control of all the lines except the Newark and South Orange and that part of the Newark and Elizabeth line, which ran through the city of Newark. In anticipation of a consolidation of all the lines, the charter of the Essex Passenger Railway Company had been obtained, which conferred full power to buy or lease other roads, and to construct lines anywhere in the county with the consent of the public authorities. Under this act a company was formed to construct a line from Market street, East of the railroad through Union, Elm and Pacific streets, and this company at once purchased the abandoned line of the Newark, Harrison and Kearney Company, and formed a continuous line from Harrison over the bridge to Broad street and through Market to Pacific street. Soon afterwards the Essex Passenger Company purchased the entire stock and property of the Orange and Newark and the Newark and Bloomfield companies. The majority of the stock of the Irvington Company was held by the same parties, and it was operated by Mr. Battin as president. Under this consolidation, and the excellent management of Mr. Battin the company steadily increased in efficiency. In 1889, it became manitest that electricity could be used successfully as a motive power for street railways and the Rapid Transit Street Railway Company was formed by other parties. This line had remarkable success.

In the latter part of 1889, Mr. Thomas C. Barr, of Philadelphia, who had proved his capacity as president of two street railroad companies in that city, had his attention directed to the situation of the roads in Essex, Union and Hudson counties, and formed the design of consolidating them all under one management as far as possible. Enlisting influential friends in the enterprise and cooperating with some of the gentlemen who owned the Essex Passenger lines, he succeeded in the early part of 1890, in organizing a new company known as the Newark Passenger Railway Company, and by purchase and consolidation under the laws of the State, this company absorbed the whole of the Essex Passenger system. In April, 1890, all these lines were united under the presidency and management of Mr. Barr, with Mr John N. Akarman as general



POWER HOUSE, NEW JERSEY TRACTION CO., CORNER BEDFORD STREET AND SPRINGFIELD AVENUE.

superintendent. Immediately on taking control, Mr. Barr proceeded to equip the Irvington line with electricity and had it in operation as the first electric road in the State, in October, 1890. Soon after this electric line was in operation the Rapid Transit line was finished and the rivalry and clashing of interests led to much difficulty, and threatened to embarass both companies in their plans of extension and improvement. But in July, 1891, all these difficulties were removed by an arrangement by which the Newark Passenger Company agreed to lease the property of the Rapid Transit Company and assume its liabilities. In the early part of 1892, the Newark Passenger Company having obtained control of the Rapid Transit lines, used part of them in connection with its Irvington line in Market street, to make an electrical line from Llewellyn Park in West Orange, through Orange and East Orange, to



POWER HOUSE NEW JERSEY TRACTION CO., BOYD STREET.

Market street station. This was opened on February 1, 1892, and proved a great success. With a view to reach similar results, by means of extensions, with electric equipment to Jersey City, Elizabeth and other towns, and in order to furnish the most efficient means of developing the entire street railway system of the three counties in harmony, a company was formed in 1892, under the general corporation laws, under the name of New Jersey Traction Company. Its main purpose is to control and extend the lines of the three counties of Essex, Union and Hudson. For this purpose it has leased the entire property of the Newark Passenger Railway Company, including the Rapid Transit Street Railway Company, for 909 years. The lines now controlled by the New Jersey Traction Company are still under the charge of Mr. Barr, as president. Mr. John I. Waterbury, president of the Manhattan Trust Company, is the vicepresident, and gives the financial interests of the company his special attention.

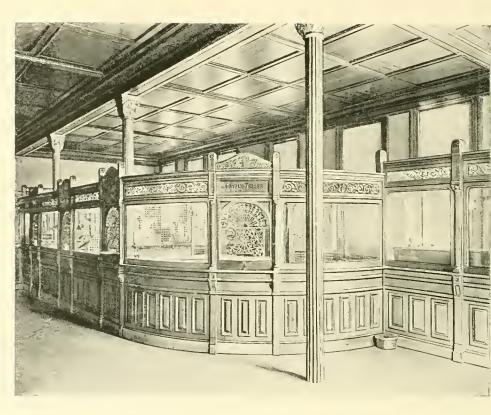
THE STATE BANKING COMPANY.

T IS scarcely necessary to call the reader's attention to the beautiful illustration on this page, or to say a single word in its praise. Seldom is it that the artist who pencils such a difficult piece of work, succeeds in bringing out the fine lines, with pillar and panel all combined, with such exactness and marvellous skill as is seen in the picture on this page of the model banking room of the State Banking Company, situated in the substantial four-story brick building at the northwest corner of Market and Halsey streets. This popular institution was organized in 1871, or little more than twenty years ago, and under the State banking laws, and is the only bank outside of the National household in the city of Newark. Notwithstanding this fact the institution enjoys a popularity as wide as the State and a patronage from among the business men thereof, and of which any bank might be proud, which speaks a language in regard to its management and safety not to be

misunderstood. The capital stock of this distinctly State bank is \$100,000, which is largely held by men who are leading citizens of German descent. It will be remembered in this connection that nearly or quite one-fifth of the population of this great manufacturing centre is German, among whom are numbered some of our most highly respected and wealthiest citizens, some of whom rank as more than millionaires. Indeed this bank has



JULIUS STAPEF, CASHIER



INTERIOR VIEW OF THE STATE BANKING COMPANY.

been officered from its beginning by Germans. Its first president was Mr. F. Reynold, now deceased. He was succeeded by the wealthy Hamburgh Place brewer, Joseph Hensler, Esq., and he in 1879 by Mr. Edward Shickhaus, of the flourishing pork-packing firm of Shickhaus & Pruden. Judge Gottfried Krueger is vicepresident. Mr. George Webner was its first cashier, he being succeeded in 1876 by the present popular cashier, Ex-County Register Julius Stapff, a remarkably striking photographic likeness of whom is seen herewith. He has as his assistant cashier William Scheerer, Esq., while the popular ex-president of the Board of Education of the city is comptroller, with Theodore Horn as notary. Around the officers the stockholders have thrown a cordon of as painstaking and careful set of directors as any bank or other financial institution can boast in the city or State, in the persons of Albert P. Condit, Francis H. Sieger, C. Feigenspan, John M. Mentz, Julius Gerth, E. C. Hay, M. Issler, J. Sturm and C. A. Lehmann, with the officers, all of whom are in the Board.

If there is one thing more than another which has caused the adherence of such a large proportion of those who have made their bow to the Board of Directors and officers of the bank under consideration, we should have no hesitancy in saying that it is the genial good heartedness which pervades the whole body, and the halo of unquestioned safety which runs through every fibre of the concern and permeates every man in connection, earrying him to the very pinnacle of determination to hold himself ever ready to shield from harm every individual for whom he has accepted a trust.

With such solid financial institutions as this for a basis, and with every one of her sisters as financially firm as the rocks of Gibralter, Newarkers have a right to feel proud and while the men of old Essex are glorying over the marvellous growth, prosperity and mighty extent of her manufacturing industries, peerless among American cities where population is considered, and marvellous in the world where the skill of her mechanics and artizans are concerned, they must not forget the illumined rays of bright financiering shooting out from our banking institutions, to light the paths of others or to financially enlighten the world.

THE PRUDENTIAL INSURANCE COMPANY

The Prudential Insurance Company of America, whose home office building we show on this page, is one of the foremost financial institutions in the city, and in fact, in the country, its phenomenal success having drawn the attention of financiers wherever its operations are known. It began business in 1876, in this city, its object being to issue small policies ranging in amounts from ten to a thousand dollars, the premiums upon which are paid in small amounts, weekly. This was an entirely

new field, so far as this country was concerned, and the work of extending its operation was necessarily slow, especially as its business was confined to those persons who, before this, had no practical knowledge of life insurance, inasmuch as it had been impossible for them to obtain policies owing to the large premiums required. Consequently a good deal of time was expended in educating the masses up to the point where they felt the need of life insurance.

Notwithstanding these drawbacks however, the company at the end of the first year had issued 7,904 policies and obtained a premium income of S14,543. The officers began, and have continued to do business upon a very conservative basis, and it was nearly two years before anything was attempted outside of Newark. But at the end of that time it entered other cities in the State, such as Paterson, Jersey City and Trenton. In 1879, it felt warranted in branching out still further and deposited the customary \$100,000 with the State Treasurer, thus obtaining the privilege of doing business in other States. It then

opened offices in New York and Pennsylvania. From that time to this it has gradually extended its operations until now it is doing business in all the principal cities in the North and Northwest.

It has gained an enviable reputation for fairness and liberality, especially in the matter of paying death claims. It has always been foremost in the matter of concessions to its policy holders. Its original plan contemplated issuing policies to every healthy member of a family between the ages of one and seventy, which was a great advance over what had been done previously, since the ordinary insurance companies had confined their dealings entirely to adult male members. It has also, from time to time, granted

other advantages to policy-holders, such as — Issuing an incontestable policy; giving dividend addition—to its Industrial policies; issuing pail-up term policies to Industrial policy-holders, and Endowment policies upon the weekly payment plan. At the beginning of 1892, it arranged to give paid-up policies to persons who have been insured for at least five years and are at least eighteen years of age. As soon as the success of the Prudential had been demonstrated, other companies were formed

to do the same kind of business, but the Prudential claims to issue the most liberal Irdustrial policy of any company in America.

Its financial standing is unquestioned. Its pecuhar success in this direction has been due to the judicious investment of its finds, which has not only been safely, but profitably done. The officers have always endeavored, in view of the possibility of the rate of interest decreasing and also knowing that epidemics are likely to occur, to secure a surplus over and above the reserve required by law.

Their new building was completed and occupied by them in May, of 1892. At present the company occupies but two floors, renting out the remaining eight stories, the expectation being that as the company increases, less will be held for rent and more devoted to the company's use.

The seventeenth annual statement, which brings the figures down to December 1, 1592, shows the assets of the company to be \$5,540,853. The amount of insurance written during 1892, was over \$97,000,000. The claims paid were over \$2,500,000. The number of policies issued over

THE PRUDENTIAL BUILDING.

808,000. The total amount of death claims paid, up to the end of 1892, was over 811,500,000.

The Board of Directors are John F. Dryden, Henry J. Yates, Edgar B. Ward, Theodore C. E. Blanchard, Seth A. Keeney, Leslie D. Ward, James Perry, Aaron Carter, Jr., Edward Kanouse, Horace Alling, Charles G. Campbell, Elias S. Ward, Fred C. Blanchard, Forrest F. Dryden. The officers are John F. Dryden, president; Leslie D. Ward, vice-president; Edgar B. Ward, 2nd. vice-president and counsel; Forrest F. Dryden, secretary; John B. Lunger, actuary and manager of ordinary branch; Edward H. Hamill, M. D., medical director, Theodore C. E. Blanchard, superintendent of real estate.

THE U. S. CREDIT SYSTEM COMPANY.

A DISTINCTIVELY Newark institution has its elegant home in the beautiful nine-story stone structure which the company has recently erected at a cost of more than a quarter of a million of dollars, on the northeast corner of Market and Washington streets, just opposite the point where the electric cars pass and repass every two or three minutes on their flying trips to and from Market Street Depot and the city of Orange, and from the "Neck" to South Orange and Irvington.

This institution, which is so positively to the manor born, was the fruit of the genius of Mr. L. Maybaum, a Newark man, and is steadily pursuing its wondrously successful way, under the push and spur of Newark business men and firmly supported by Newark capital. As the busy ages rolled by and great institu-

who, of course, is eminently fitted for the place. That no mistakes were made in the organization, is demonstrated beyond question in the rapid progress the company has made and the popularity it has so quickly won, and the high reputation it has so early achieved. The company has for their object guaranteeing, under clearly defined rules and regulations, the wholesale merchant against loss, just as under other conditions, a fire insurance company would guarantee against loss by fire. That the reader may understand at a glance with what wide open arms and confidence the merchants received the plan of the young Newarker's evolution of genius for their protection, is seen in the mighty volume of business which they did from the start, reaching as their books plainly show, to over thirty millions in the first three and a



OFFICERS OF THE U. S CREDIT SYSTEM COMPANY.

tions were founded to meet exigencies and fill crying wants, to protect owners of property against loss by fire, accidental insurance, insurance on the life of an individual or endowment, that was to meet him half way on life's journey, but the industry under consideration was hidden away in the womb of time awaiting the call of a thoughtful Newark man to come forth and bring with him those benizens of safety which the merchant had sorrowfully sought for years but found them not.

The United States Credit System Company began its career in 1888, organizing for work in November of that year by the election of 11 on. W. H. F. Fiedler, who besides being post-master of Newark under the brilliant Cleveland administration, had already filled the office of Mayor of his native city of Newark, and had been elected by the people of his district to represent them in Congress, as their president; Hon. Gottfried Kreuger, one of Newark's most popular and wealthy citizens, a Judge of the Court of Errors and Appeals, as vice-president; Ex-County Register Julius Stapff, as treasurer; Mr. Frederick M. Wheeler, a rising young business man, as secretary, and filling the position of actuary with the inventor of the system, Mr. L. Maybaum,

half years of their business operations and issuing during that short period certificates of guarantee against excessive loss by reason of bad debts to importers, jobbers and manufacturers doing a business of at least three thousand millions of dollars. As a farther evidence of its wonderfully beneficent work among merchants, it can be said that during the short period of four years, and while the institution was young and among strangers, who indeed were found near of kin when formal introductions had passed, the company paid out more than \$400,000. Thus from the beginning has the expectation of the genius who formulated the ideas upon which the company was organized, the capitalists who risked their money to lay the foundations and build its superstructure, and the men who lent their good names and risked their hardearned business fame, have been realized. Had it been the fruit of a lifetime of thought, and the evolvement of scores of weighty years of business toil and mental labor, the happy results so beautifully spread out before the public could not be otherwise than satisfying in the highest degree. But here is the full measure of a business success heaped up, rounded in, pressed down and running over, giving a handsome return to the men who made the risk, and to the merchants all over the country, who saw immediately, as the young institution was launched on the turbulent waters of the great business ocean, of what excellent material the craft was built, and how splendidly she rode the billows, and the solid men who were at the helm, and on the bridge, and at all the other posts of duty, that it was a safe business craft to sail in, and accepted its promises and are now gathering a rich reward from the ripe fruits of the first ingathering of the harvest.

For the Credit System Company, no word of Newark N J., ILLUSTRATED, the pages of which are beautifully embellished with

life-like engravings of the officers, and the great palace of granite which it has built for its home, can speak the truth of its marvellous career half so well as the fact itself, that the company, having been organized with a capital of only \$100,000, has at the present time, assets of over a half million, and is daily adding fresh leaves to the chaplet of victory. It was a proud day, indeed, for Mr. L. Maybaum, when he caught the idea of insuring against the baneful influence of bad debts, and a still happier one when he had so formulated the idea and skeletoned the model of the ship that the officers, directors and a large number of stockholders could see its logic with the keen, clear businesseye of faith, and not only risk their own capital, but advise others to do the same, in building and rigging a business venture after his plans and successfully launch her.

The sombre cloud of bad debts which has hung like a nightmare of hideous form and heartrending shape over the mercantile world will have been swept away through the benign influence of safety which is

riding upon the golden wings of the Credit System Company, in readiness to dispense its benizens of favor.

Here then is a beautiful thought for young men starting out on a mercantile career to treasure, study and develop. With only the ordinary precautions in entering upon a business undertaking need they be troubled. They will need not the experience of a fair lifetime to guide them safely on in a prosperous career before venturing. They have only to place themselves under the protecting care of this Credit System Company, and look at the world through their argus eye, which has its own peculiar way of peering into the business part, and with a magic rule taking the measure of their financial standing and dispensing results to their customers without fear or fayor.

LUDWIG SCHILL.

PRIOR to the time of Daguerre, the wealthy only, as a rule, had the privilege of gazing upon the face of a friend or his own even, since few but the rich could command the artist's pencil and the genius of a painter to enliven the canvas with the face of the living, to speak out what they were when time with them has ended here and the original has passed away into a never ending eternity.

Upon the crude originals which came out of the old Frenchman's chamber, improvements have been made from time to time, in

the rare chemistry, as well as in the magic art of their production. Pictures have been sent forth from galleries all over the world, of this type or that, many under new names, but only such as were in reality meritorious, came to stay, the others to fade from the plate as the names of their originators and makers would fade from memory, or be stricken from the roll of recollection.

For the past few years the photographer has had the field, and it is little wonder, since no class of artists has shown such abundant reasons for the confidence of the public and its lasting popularity.

Among those who have won from fickle Dame Fortune her sweetest smile, and from his photographic business an enduring success, is Ludwig Schill, whose elegantly equipped studio occupies parts of the three upper floors or stories of the great Credit System building, situate at the corner of Market and Washington streets, and heautifully illustrated on roof peak of which, as is seen, floats his business banner bearing the name of "Schill." The studio is reached by broad, easy



U. S. CREDIT SYSTEM COMPANY'S BUILDING,

stairways, and double elevators leading up from the Washington street entrance. Mr. Schill is a practical photographer, whose success is quite phenomenal, his skill as an artist having not alone given him popularity, but an elegant competence as well, in generous return for his honorable work. All the varieties of fancy lighting and artistic effects are produced.

The rooms are large and airy, and tastefully furnished; indeed everything about this whole unique establishment is very satisfactory. The elevators before mentioned open at the doors of the reception rooms. His success in securing correct likenesses is truly phenomenal—Such is his popularity among the mothers of the little ones that nearly seventy per cent, of his business is among the children.

THE GAS INDUSTRY.

EN who contribute by brain or capital, directly or indirectly, to the health, comfort, happiness, prosperity or longevity of the masses, are humanitarians in the most extended sense of the word, which, though long is musical, and carries with it a cadence, sweeter than almost any other word in the language, long or short, and fulminates an illuminating power which reaches the depths of the fountain, from which is distilled the essence of success.

Of this class of men, God bless them, the city of Newark possesses a larger proportion, according to her population, than any other city in the country. Far be it from us to make this assertion in any other than in the earnest and sincere

belief of its truthfulness, so susceptible to us appears the fact of its demonstration. And how should this happy state of affairs, so admirable in all its bearings, apply so happily to Newark? This is as easy a problem to solve as was the primary question of its existance, and it is done in this wise. First, the great majority of the men who stand at the head of the great industrial concerns, which contribute so much to its good name and fair fame, were either poor themselves, or their fathers before them, and know the difference between pure metal and dross, learned by the teachings of a practical experience, and having passed through all the trials, and met the stern realities face to face, are ever ready to carry out the tenets of the golden rule, to do unto others as you would have them do unto you.

In passing, methinks we hear some one say, "Oh! there are exceptions." Yes indeed there are, but in Newark so many great concerns have been built up from such very small beginnings, and so boundless has been the spirit of good-fellowship prevailing among the founders, upbuilders, managers and conductors of the

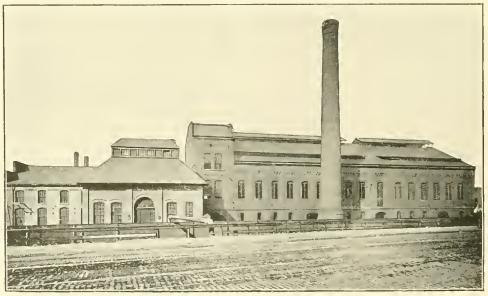


VIEW OF THE PLANT OF THE NEWARK GAS LIGHT CO., ON JERSEY STREET.

manufacturing interests, great and small, young and old, that the preponderance of the rule becomes so great that exceptions are in fact unworthy of consideration. Such are the men upon whose broad shoulders rests the duty of upholding her name and honor and maintaining her credit. When such men, men who have grown up where adversity lurked, where clouds of business troubles hung heavy, and it required the clearest eyesight, the levelest of heads, and the most careful watching to get a glimpse of the silver lining beyond, and who have felt the long continued strain of mental and physical exertion necessary for its dispersion, are upon the walls, who shall say the citadel is not safe? All honor then, to the men whose enterprise, honesty of purpose, push and vim, and never-say-fail spirit have made Newark what she is, queen city among her sisters in manufacturing interests. All honor to the men who have led the pure mountain spring water to every door; who have made travel quick, cheap and easy from point to point by means of the great steam railroads and electric cars; who have built the telegraph, the telephone, and set

up the electric light and power,

plants and built the motor and dynamo; and lastly, the men who have lighted her streets and homes for years, keeping the dark places bright and chasing evil doers from her bounds, generously aided by the gas light through the dark hours burning. Among these who have been humanitarians in its most extended sense, and who have been watchmen on her walls, are the founders of this gas producing industry, who have held aloft the shining light for more than a half century, and contributed largely from the storehouse of their minds to the city's growth and prosperity, and right well have their successors upheld the good names and fair fames of the men who preceded them. Space forbids the tribute due to the self-sacrificing spirits



VIEW OF THE NEWARK GAS LIGHT (Q), LOOKING NORTHEAST ON MARKET STREET,

who have made the light to shine in dark places. The field is rich in just such men, and those with kindred spirits whose names are truthful synonyms of progress, and whose strong right arms have upheld the blazing gas light and gave the word of command to the veritable army of silent watchmen ranged along the street sides, every one of which have long been miniture "statues of liberty," lamp holders lighting the world. The great industrial establishments which have played such an important part in the growth and progress of the city, and upon which so many of her public and private interests lean, deserve a prominent and conspicious place wherever any of the city's industries are represented, and especially so in this beautiful work of NEWARK,



VIEW OF THE NEWARK GAS LIGHT CO., LOOKING SOUTH ON MARKET STREET.

N. J., ILLUSTRATED. That our artist has done himself credit in transferring these immense gas making plants to these pages will be seen at a glance as the leaves are turned.

We herewith present several views of the works of the Newark Gas Light Company, that represent one of the most perfect gas plants in the country. The company has two complete works, by use of which all the gas required in the city can be made by means of the Wilkinson system, which is the best and most economical method for producing a high grade water gas, and by the other works, which are fitted with the best known appliance for economically producing coal gas, it is possible to manufacture all the gas that may be used in the city.

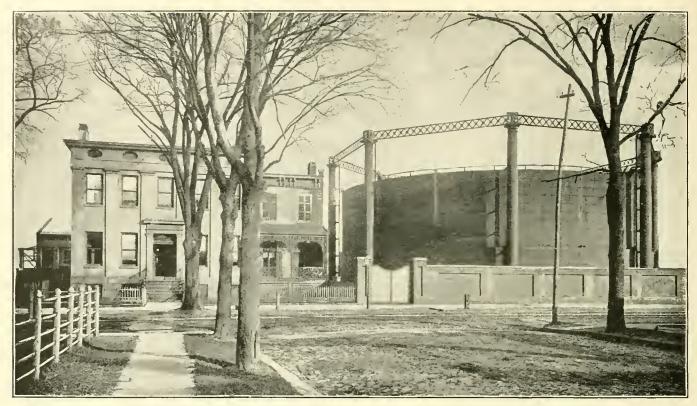
The Newark Gas Light Company has been, and is, one of the most successful corporations in the city. Its charter was granted in 1845, and the first board of directors were Beach Vanderpool lsaac Baldwin, James Keene, Samuel Meeker, C. B. Dungan, Joseph Reakirt, H. D. Steever, Joseph Battin, Jeremiah C. Garthwaite. The company has been successful from the commencement of its operations and has always been managed in a conservative, but progressive spirit. The officers now are, Eugene Vanderpool, president; Edward II. Wright, vice-president; James P. Dusenberry, secretary; John I. Young, treasurer; Alfred E. Forstall, superintendent. The present board of directors are, Eugene Vanderhool, Theodore Runyon, Edward H. Wright, Marcus L. Ward, Robert F. Ballantine, John R. Emery, S. 11. Plum, Franklin Murphy, H. N. Congar.

Some of the gentlemen whose names appear in the direction and in the official list, have been connected with the gas-producing interests since the first organization of the Newark Gas Light Company. They have been eye-witnesses of the growth and progress of the city, and have been, along with their associates, the means of throwing more light on the subject than any other class of our industrial citizens. The gaslight industry as conducted in the city of Newark, is not alone a business requiring the

appliances of science as well as the resources of capital, but is an essentially productive one, as the financial standing of those who have found their life work where the gas for light producing is manufactured, can truthfully say. No industry of the rapidly growing city of greater care than that of gasmaking. Nor indeed has there been many which can vie with it in the rapid progress made from the very foundation. As the reader glances at the array of business names which appear for its prosperity will be seen and its future easily divined. No illustrations in this book speak a more comprehensive language nor tell a plainer gas producing industry.



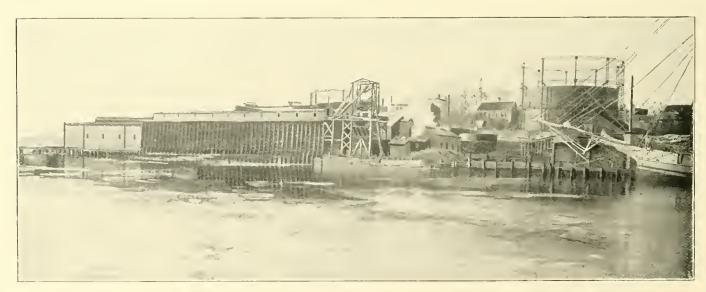
VIEW OF THE NEWARK GAS LIGHT CO., ON PASSAIC RIVER.



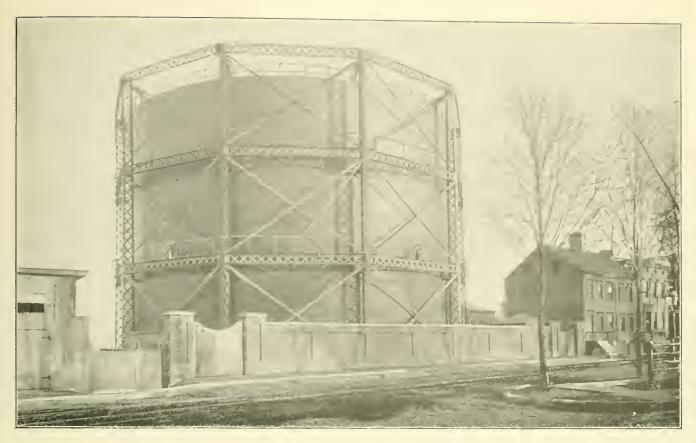
VIEW OF OFFICE AND WORKS OF THE CITIZENS' GAS LIGHT COMPANY.

THE CITIZENS' GAS LIGHT CO.

THE extent and value of an industry may be judged, perhaps, more correctly by the amount of capital invested for the purpose of carrying it on than in any other way. In particular is this the case in the rich and productive industry of manufacturing gas from coal or water, for heating, lighting and power purposes. Newark has proved a very prolific field as is demonstrated in the fact that already three companies, with a capital of more than two millions, are engaged in conducting gas manufacturing establishments, employed in the work of turning out a product which finds a market and consumers very near the factory. For the three decades, before the time when Newark began her phenomenal growth, there was but one set of gas making apparatus, but it could be easily seen that the industry was a rich repaying one. When Newark grew on and on at such a rapid pace, when capital from nearly every part of the world found its way to this manufacturing centre, and thousands of the best skilled workmen and mechanics of many nations gathered within her factory walls, and new homes which were springing up on all sides became the habitations of the rapidly increasing body of artists and mechanics, the necessity of a greater supply of gas for lighting the long lines of new streets, which were reaching out in all directions and as well as the immense rows of dwelling houses, where the mighty army of workmen had their families domiciled, was easily seen. One of the first to see the want in its proper light and to take up the subject



DOCK VIEW FROM PASSAIC RIVER OF THE WORKS OF THE CITIZENS GAS LIGHT COMPANY.



SECTIONAL VIEW OF THE WORKS OF THE CITIZENS GAS LIGHT COMPANY

of a greater gas supply, was the wide-awake business man and indefatigable worker, Andrew A. Smalley, Esq., who had been successfully conducting a steam boat freight line, between Newark and New York. Of course, some objection was raised by the old company, which had the field all to itself, but Mr. Smalley and a few other spirited capitalists, who could see the silver lining behind the dark cloud, procured a charter and organized a new gas manufacturing company, with a capital of a million dollars, and bestowed upon it the name of The Citizens' Gas Company. The city had already taken the northward trend and to the west lay the beautiful and rapidly growing Oranges, inviting fields into which to carry their new enterprises. When the stock of the concern had been taken, the holders recognizing the work already done and seeing in Andrew A. Smalley the bud of promise as a gas manipulator, the company made him their president and placed in his hands the management of its affairs, and time and results have demonstrated that they made no mistake. With a corps of willing assistants Mr. Smalley set to work, and soon the beautiful works on the Passaic



ANDREW A. SMALLEY, FOUNDER,

at the foot of Fulton street, which are recognized by gas manufacturers everywhere, as a marvellously perfected gas making plant, were dispelling darkness in many sections of the growing city and reaching out its tenacula in many directions for more work to do and comforts to bestow. With that push and remarkable vim which have always been predominent qualities of his nature, it wasn't long before the Citizens' had not only absorbed the Orange Gas Light Company, but had amicably arranged a division of the city of Newark with the generons old Newark Company, and the two corporations went on in the work of manufacturing and supplying gas and growing rich together.

In July last, Mr. Smalley, owing to ill health, reluctantly laid down the burthen, resigned the presidency and retired to his beautiful home, No. 176 Roseville avenue, where on Thanksgiving Day all the office employees paid him a visit, and, along with words of respect and affection, presented him with an elegant token of their regard and esteem.

Few illustrations among the thousands which have found a place between the rich covers of Newark, N. J., Illustrated, speak out more truthfully for their subject sketches than do these, which represent the extensive plant of The Citizens' Gas Light Company on pages 232 and 233, as well as the photophic likeness of Ex-President Andrew A. Smalley, the founder.

The Citizens' Gas Light Company was chartered in 1868. The officers at present are John L. Blake, president; Stephen H. Condict, vice-president; Bobert B. Hathorn, treasurer; Clarence L. Nelson, secretary; Alexander H. Strecker, superintendent and engineer. The directors are Andrew A. Smalley, Stephen H. Condict, Henry C. Kelsey, Charles A. Lighthipe, John L. Blake, E. Luther Joy, Henry Powles, George A. Halsey and George B. Jenkinson.



ROW OF BRICK RESIDENCES, PENNSYLVANIA AVENUE, NEWARK. BUILT BY CONRAD, WOOD & HELLINGS OF PHILADELPHIA, PA.

NEWARK REAL ESTATE.

A N IMPRESSIVE view of the almost magic growth of the numerous interests, so successfully conducted in the city of Newark, is obtained from a careful perusal of the statistics, furnished in the official reports of the United States census bureau. In many of the great industries for which the city is noted, and



JOHN M. BURNETT.

even in the individual establishments among them, the growth during the past quarter of a century has been so rapid as to furnish corroborative evidence, if it were needed, of the increase of wealth, material prosperity, and the enlightenment of her citizens. Men of wide experience are authority for the statement that within the next ten years the value of Newark city real estate will, without doubt, rise more than one-third beyond its present value.

It is a pleasure for a historian in the duty of jotting down facts in men's lives and characters, to find a citizen who during twentyfive years of active business life has made the impression upon the city's progress that is set to the credit of the gentleman whose portrait forms an illustration on this page, Mr. John M. Burnett, real estate broker, No. 191 Market street. Mr. Burnett comes of good old business antecedents. His father, a descendent of revolutionary stock, came from Springfield, N. J., in 1810, and was a Newark business man until his death in 1879, having carried on an extensive lumber business in this city for a number of years. John M. was born in Franklin street, old South ward, in 1838, and was in business with him until 1867. He then took up the real estate business in New York city and Newark combined He carried on business in the Borell Building, No. 119 Broadway, New York, till 1875, then he brought his whole efforts to bear in Newark real estate and from that time until the present, 1893, has been a successful operator in the business, having made some of the largest sales ever made in Newark. This gentleman's transactions cover a general real estate business in the wide acceptancy of the term, including the buying, selling and exchanging of property in Newark and the surrounding country. He takes full charge of large estates and the placing of loans upon desirable security. Mr. Burnett is a prominent appraiser, being thoroughly versed in all the property values. He keeps a complete register containing illustrations of the various sections of the city, building plans, leases of property, mortgages, conveyances, etc., by which he is enabled at a glance to impart the fullest imformation of perhaps every important real estate transfer since 1867, down to the present date.

A. J. GLESS.

OMPETItition is the real essence of all progress. It is met with in every department of industry and human activity, it stimulates and encourages inventiveness and enterprise, and enlivens private life as well as business. The steady development of the city's real estate interests is due in a large degree to the honorable, and eonservative method pursued by the energetic citizens who have so ably represented this im-



INTERIOR VIEW OF THE REAL ESTATE OFFICE OF A.J. GLESS,

portant branch of Newark's industry. At no time have they sought to create, or inflate values, but rather to retain the market upon the basis of actual worth, as regard an income producing capacity. There are but few, if any interests, in this great industrial city that are not secondary to that of real estate, and in this connection it is but fair to record the promoters of this immense

estate industry of Newark, N. J.

A. J. GLESS.

industry, and in particular those enterprising men who have given to the profession such a helping hand as has the subject of this sketch, Mr. A. J. Gless, real estate broker and insurance agent whose office is located at No. 151 Springfield avenue. This young and energetic Newarker has been active in extending the material growth of the westerly section of the city. He conducts a general real estate business, in the buying, selling and exchanging of property, takes the entire care of estates and negotiates loans on bond and mortgage, writing policies of fire insurance, for which he has exceptional facilities. His office which is given in the illustration on this page from a photograph, is admirably fitted up and affords ample facilities for the accommodation of his numerous clients. Mr. Gless, whose photo is also herewith given has demonstrated his ability to successfully conduct the line of business in which he is noted for displaying a spirit of enterprise, his wide experience and thorough knowledge of the real estate market aiding him in all his movements. He is classed as one of the leading and most enterprising property brokers in the city, and is a worthy representative of the real

The telling inside view of the real estate office of Mr. A. J. Gless answers truthfully the intent of the artist, who produced through the wide open eye of the camera, and the engraver who prepared so faithfully the plate from which it is printed. It will need but a glance from the student of Newark, N. J., littstrated to see that a great business is transacted within the four walls and over

Among the very large number of men who have wrought the field of real estate in order to gather the necessaries of life from its proceeds, or build up a fortune all do not succeed. Many vielding to its bright allurements and witnessing the marvelous success won by men of the pattern of A. J. Gless, enter but the portals, wait a short while and retire. Had they but stopped to inquire the way from Mr. Gless they would have heard the same old honest answer, as follows, "Start out with a determination to win," read the motto carefully "By industry we thrive." Study the self-reliance which speaks from every lineament of his countenance and learn from him how to win in the real estate business.



LOUIS J. PRIETH.

LOUIS J. PRIETH.

A MONG the real estate men who are rapidly gaining prominence, few are making more rapid progress than Louis J. Prieth, the youngest man in the business, as is demonstrated in the excellent photo of himself which is seen on this page. Mr. Prieth has his business office at No. 76 Springfield avenue, where he may be found during business hours. Mr. Prieth has become identified of late with the sale of the property known as the Maple avenue and McGregor tracts. He also takes full charge of estates.



ORRIN E. RUNYON.



ARTHUR CONNELLY.

ARTHUR CONNELLY.

A MONG the large number in the city of Newark, who have built lasting monuments of their skill in the architectural line, Mr. Arthur Connelly takes rank among the most successful. To his credit stand many of the best and most attractive buildings in the city, which have been constructed after designs and plans conceived in his brain, drawn out in his offices at No. 279 Market street and constructed under his own personal supervision. The manner of man that Architect Connelly is, may be seen in his photograph on this page. Few faces bespeak the calling of the individual more truthfully and strikingly than does this.

ORRIN E. RUNYON.

RRIN E. RUNYON has been prominently identified with the real estate interests of Newark for a dozen years, and in that time has made himself well and favorably known throughout the State. Although not having been engaged in the business as long as some of the older brokers, his many large transactions successfully negotiated have brought him into prominence, and his services have therefore been in constant demand. He was born in Plainfield, this State, but his boyhood days were spent in Springfield, Ill., where his father was one of the best known printers of the West, during the war, frequently having large government contracts. The subject of our sketch returned to Plainfield in 1868, and soon afterwards entered the Central New Jersey Times office and learned the printers' trade, which he followed for several years, becoming an expert in all its branches. In 1881, he came to Newark to keep books for the firm of J. C. Smith & Co., flour and grain dealers, and two years later entered the office of R. Burgess, who was then one of the prominent real estate brokers. Mr. Runyon applied himself so closely to the business that a year later Mr. Burgess took him into partnership. In 1887, Mr. Runyon bought out Mr. Burgess' interest in the firm and continued the business alone. In 1801, the business was incorporated under the name of the Newark Real Estate Company, and Mr. Runyon has been the president and manager ever since. The company is well equipped for its business, occupying fine offices on the ground floor of the Liverpool & London & Globe Building. Their desire is to make Newark property a specialty.







LOUIS SCHLESINGER.

BROWN & SCHLESINGER

A MONG the photographs which form the illustrations of this work, none are more natural and life-like, or more strikingly representative of their originals than those of the well-known real estate men, William II. Brown and Louis Schlesinger, whose business offices are located at Nos. 746 and 748 Broad street. The senior member of the firm, Mr. William II. Brown, has long been identified with Newark and for years her interests have been his, and it is not saying more than is his due, that he never shows in better form than in the performance of some public duty. An utter abnegation of self has ever been a prominent characteristic with him, and whether in the thickest of the fight on the field of battle, as a soldier when his country called, or in the performance of hi, duty where the smoke was the thickest and the fire the hottest, as chief engineer or fireman, that same unselfishness was ever manifests.

Such qualities always have their manifestation in the confidence and affections of friends and neighbors, and whenever an honest and fearless leader is wanted the eye of faith is turned toward such men as William II. Brown. Mr. Louis Schlesinger, the junior member of the firm, is also a Newarker of a life time, and upon him devolves the duty of attending principally to the large real estate business entrusted to the company's care, and among Newark's real estate dealers none stand higher. Not a small part of the firm's business is the buying and selling of real estate, the negotiating of loans on bond and mortgage, effecting fire insurance, etc.

PHILIP MILLER.

A S IN the buying and selling of merchandise or farm productions, where agents are required, so in the sale, exchange and transfer of real estate, houses and lots, factory plots and buildings, there must be men who make it their business. Among real estate agents and operators few have had a larger experience, and none are more trustworthy and painstaking in their efforts than Philip Miller, whose offices are at No. 201 Market street. Mr. Miller can point to many large transactions with much satisfaction, he having been in the business of handling real estate for many years, several of which were in company with the late David B. Hedden, who was an old and experienced agent. Since the death of Mr. Hedden, Mr. Miller has continued the business of buying and selling real estate, effecting insurance, negotiating loans on bond and mortgage and selling patents. Mr. Miller conducted the butchering business for a quarter of a century and for more than a decade of years was public meat inspector for the city. The photographic likeness of this experienced and honorable real estate agent appears on this page.



PHILIP MILLER.



YARD AND OFFICE OF THE LEHIGH AND WILKESBARRE COAL COMPANY

IN ALL our large cities coal is the staple fuel, and consequently its production and distribution is a leading industry. Large aggregations of capital are necessary to carry on the business, hence great companies are formed to carry out enterprises too gigantic for a single individual to successfully prosecute. The company whose name stands at the head of this note is one of the best and largest in the State of New Jersey, and the amount of coal distributed by it is simply enormous, as a glance at their yards at Ferry and Congress streets, and East Ferry and Market streets, in the city of Newark will soon convince any enquiring mind. The location is central, and distribution by means of its almost countless tracks and carts is comparatively easy. But large as the retail business of the company is, it is small compared to its wholesale trade. From a car load to a dozen cargoes, this company delivers coal at any point where desired, and the quality of the coal mined by it is so well known that it needs no other recommendation. The immense manufacturing interests of Newark are so dependent upon an ample supply of fuel that that city is not only a heavy consumer of coal, but also a distributing point for a trade that is reckoned by millions of tons annually. The company owning its mines is not compelled to purchase its supplies in open market, and consequently can be relied upon to fulfil any engagement which it may enter into for the delivery of coal.

Mr. J. E. Fleming, the agent in charge of the company's interests in Newark, was sent by the Wilkesbarre Coal and Iron Co., to establish a branch of their business in Newark, during the spring of 1873, which



COL. J. E. FLEMING.

establish a branch of their business in Newark, during the spring of 1873, which company was afterwards merged into the Lehigh and Wilkesbarre Coal Co. The twenty years' experience of this company in our city enables it to know the wants of the domestic and manufacturing interests and grades of anthracite coal required by them. The large pockets recently built in their yards, from which the coal is run over screens into wagons is a vast improvement over the old mode of delivery. The company loses no opportunity to take advantage of all modern improvements in preparing their coal for market.

Colonel Fleming not only attends to the large business interests entrusted to him, but he varies the routine by taking an interest in the city's welfare through the Board of Trade, of which he is one of the oldest members and treasurer. He is also a director in the Balbach Smelting and Refining Co., a member of the Essex Club, governor in the Country Club, and member of the board of managers of the Home for Disabled Soldiers for the State.

Four years in the saddle during the war of the rebellion vidette duty, sconting and raiding, has not cooled Col. Fleming's ardor for his favorite arm of the service, as is attested by the Essex Troop of Light Cavalry, of which he is captain, and of which a competent military critic said, on the occasion of the great Columbian parade, "It is the most superb troop of cavalry ever seen in America." Col. Fleming entered the army in Harlan's Indepenent Brigade of Cavalry; afterwards the Eleventh Pennsylvania Cavalry; was wounded twice; a prisoner of war at Saulsbury, N. C., and Libby Prison. Richmond, Va., from whence he escaped; served on the staffs of Brigadier Generals Alfred Gibbs, I. J. Wister, and Major Generals William F. Smith and E. O. C. Ord, as captain and aide de camp.

R. C. BOICE COAL COMPANY.

WITH ten thousand fires burning, most of which are urged to their greatest heating capacity by air blasts of force and fury, converting the innocent fire box into the roaring furnace it must needs be that immense quantities of coal are consumed every twentyfour hours, and when to this is added the necessities for the week and month the amount consumed during the year must inevitably be simply immense. That a large percentage of the coal burned for heating purposes is understood, and mourned as lost. The fact of such loss in the consumption, coal burning for heating purposses, opens up a wide and interesting field for the inventive genius of the engineer, fireman and mechanic, and the sooner he sets himself about

the business of inventing a new fuel-saving grate for his furnace, or furnace without a grate, the better it will be for all concerned. The man who will evolve from the store-house of his genius an apparatus for burning coal with such a large percentage of loss will confer a great blessing on the human race, put money in every coal burners purse as well as his own, and call down blessings on his head, more enduring than gold, and benizens of satisfaction, sweeter than honey. We have no desire to be classed with that pessimistic order, who are continually exercised with dark forebodings of a direful future, yet we can see that the Pennsylvania coal mines may not always continue to turn out the grand heat-producing and wonderfully economical fuel. Yet there are doubtless those who never think beyond the present, which they gormandize with satisfaction, never knowing or caring what



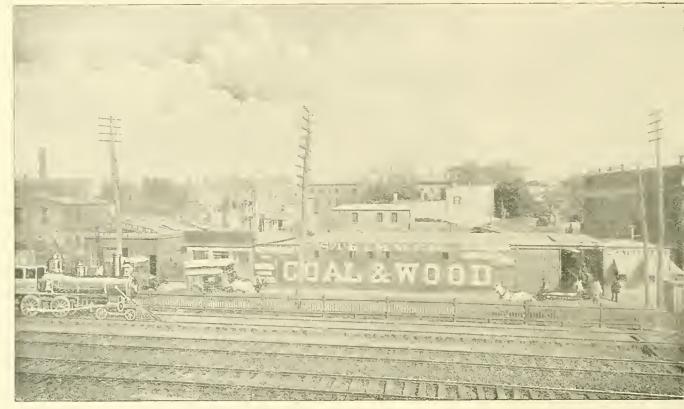
R. C. BOIČE.



COAL PLANT OF THE R. C. BOICE COMPANY, MARKET STREET AND CENTRAL RAILROAD.

may be in store for the morrow, when they are satisfied with the to-day. As the denuding of the virgin forests went on day after day, month after month, and year after year, and wood fuel continued abundant, few there were who could or would trouble themselves about the future, when scarcity was certain to take the place of abundance. A word to the wise ought to be sufficient. But we opine that the halt will not be sounded 'till the time when the pick and shovel of the miner shall delve in vain and the car wheels no longer turn under the weight of their precious burthen, and the puff of thick smoke from the pipe of the ocean steamer shall no longer gladden the heart of the watchman at Fire Island. Then, and not until then, will come up the dread ful alarm. So it was with the work of conversion of the beautiful trees of the forests into fuel, and which have been forced away forever. The ring of the woodman's axe that felled the beauties now cease to salute the ear, and the tongue of flame to devour so long as there was a promise of pay or profit in it.

There is no city in the American union of like population that consumes annually more coal than the city of Newark, N. J. With a population of 200,000 inhabitants, in which manufacturing establishments are so numerous the coal trade is one of the most important industries in the city. Among the many enterprising citizens engaged in the coal trade, we may mention the R. C. Boice Company, wholesale and retail dealers in all kinds of coal, wood and charcoal, George's Creek Cumberland coal being a specialty. The company became incorporated, June 23, 1891, under the laws of New Jersey, with an ample capital and with Mr. R. C. Boice, as president, he having established the business in 1873. The offices of the company are located at Nos. 10, 12 and 14 Lafayette street, near the Pennsylvania Railroad avenue. The yards which form the illustration on this page are situated on the line of the Newark and New York railroad, having a frontage on Nos. 562, 564 and 566 Market street. This last mentioned plant is an admirable one, fitted up with every convenience, having no fewer then twenty pockets. Great economy in handling is thus secured, the coal being dumped directly into these pockets. There is a capacity for storing enormous quantities of coal at one time. Then, the company have a large yard separate from the coal yard, proper, in which cord and bundle wood is handled, the latter being received direct from the manufacturer and farmer. The facilities of the company are in every respect "A No. 1." The company is prepared to furnish coal in any desired quantity at the most reasonable terms.



COAL AND WOOD YARDS OF S. TRIMMER, 77 TO 89 NEW JERSEY RAILROAD AVENUE.

S. TRIMINIER.

THE gentleman whose industry is displayed on this page has been before the public a sufficient length of time to establish his deserved reputation of conducting business on a strictly honorable basis. The liberal patronage which has been accorded this house demonstrates that Mr. Trimmer has always dealt in first-class quality coal, and has given honest weight. Therefore it is the very best stroke of economy to patronize a house known to be reliable in the coal it carriers. We wish to impress upon the mind of the reader and the public in general that this house deals only in the best grades of Lehigh and free burning coal, also Cannell coal for grate fires. Special attention paid to all coal being well screened before delivery. This house also deals largely in kindling wood, of all descriptions. The famous Allenkiln dried bundle wood is handled exclusively by this house in Newark and vicinity. The service is accurate and prompt, and having telephone connections, orders can be filled at short notice. The business having



CHARLES A. TERRILL.

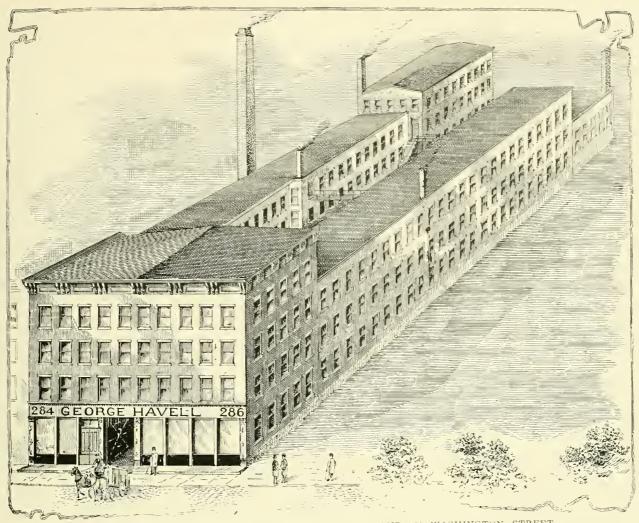
increased so rapidly, Mr. Trummer found it impossible to give the Newark business the attention it required as he also had an extensive business in New York city. He has placed in charge of the Newark office, as general manager, Mr. E. C. Strempel, under whose management it has steadily increased.

RUTAN & TERRILL.

Tile firm of Rutan & Terrill whose portraits we present herewith, are probably the two youngest dealers in the coal business in this city. Although young in years they have by their energy and integrity built up a trade of which many an older firm might well be proud. Both are natives of Newark and graduates of our public schools, where they learned that 2,000 pounds make a ton.



MELVILLE M. RUIAN.



MANUFACTURING PLANT OF GEORGE HAVELL, 284 AND 286 WASHINGTON STREET.

GEORGE HAVELL.

THIS business was established in Bloomfield, N. J., in the year 1837, by Mr. James Bishop, (stepfather of the present proprietor, Mr. George Havell). In 1842, Mr. Bishop moved the business to Newark and built the factory corner Nassan and Sheffield



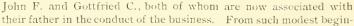
GEORGE HAVELL,

streets, now known as the Nassan Works. He conducted the business with Mr. Havell as one of his best foremen until 1863, when he retired and was succeeded by Frederick Stevens, James Roberts and George Havell, under the firm name of Stevens, Roberts and Havell, under whose able management the business increased very rapidly, so much so that in 1865, requiring larger facilities, they purchased the premises No. 284 Washington street, and a few years later bought the adjoining property No. 286, which had been the old Jewish Synagogue, the whole factory property now being 75 feet front by 300 feet deep. From time to time, however, additional buildings had to be erected to meet the demands of their growing business. In 1876, Mr. Stevens retired from the firm, the business then being continued by the remaining partners, under the style of Roberts & Havell until the spring of 1883, when, after many months of illness, Mr. Roberts died, leaving Mr. Havell the sole proprietor, under whose name the business is still continued. This is the oldest, and has been the most successful house in this line in the country, having never met with any business reverses and it bears the enviable reputation of supplying the most reliable goods among its many competitors in the United States. To enumerate all its manufactures is impossible, being in such variety and covering supplies for so many different trades. lts main lines are gilt, silvered, nickel plated, steel and enameled metal fancy goods, specialties and patented novelties. Also table cutlery and razors.

Mr. Havell has associated with him his son-in-law, Mr. Alfred G. Williams, who for the past twenty years has had charge of the very important branch of the business, the sales department. Also for the past eighteen years Mr. James D. Clark, who has had charge of the books and finances, and to whom is due great credit in retaining the financial reputation the concern has always born.

THE GOTTFRIED KRUEGER BREWING COMPANY.

JHAT changes time has wrought can be seen in the beautiful and entirely truthful illustrations of the Gottfried Krueger Brewing Company, as it stands forth to-day in its elegant model and mammoth proportions, a magnificent monument of the business tact, energy and perseverance of its owners, beside the little bijou affair of a brewery, where Gottfried Krueger began the work of his phenomenal career and the upbuilding of his fortune. With such skill has the artist done his work that the merest glance at this picture shows the design of comparing the past with the present. Not in the illustration of the plant alone has the artist shown his skill, but in the speaking likeness of Judge Krueger, and his sons,





BUILDINGS OF THE GOTTFRIED KRUEGER BREWING COMPANY.

nings as the illustration shows, has this industry grown to its present immense proportions there must have been no ordinary business tact and skill brought to bear in fostering its growth and forcing its development. The success of Gottfried Krueger, among those who know him best, is well understood to lie in an indomitable perseverance and never say fail characteristic, which he brings to bear on all his undertakings. As a result it is worthy of note, just here, that the output from the industry under his management has grown from year to year, till it to-day reaches the enormous amount of two hundred thousand (200,000) barrels of lager beer, the popular beverage that cheers, but does not inebriate. Like the larger number of the proprietors and conductors of the great breweries which have grown up in Newark, and under whose fostering care the industry of the manufacture of lager beer has had a progress with few, if any parallels, Gottfried Krueger was a practical brewer. As an apprentice he had learned the art and had early obtained such an appreciation of his calling, that others who knew him sought him as a safe young man for a business partner, and such was Gottlieb Hill, for in 1865, we find the firm of Hill & Krueger, conducting the little brewery illustrated in the upper left corner of the above cut, in which his uncle, John Liable, had but a few years before installed him foreman. The popularity of young Krueger's output of sparkling lager soon created an increased demand, and so famous did his mild and effervescing drink become, that in 1875, the, ('twas thought then almost fabulous) amount of 25,000 barrels was the result of the output per annum. One thing Mr. Krueger always kept in view, to make just as good if not a little better heer than others, thus keeping his popularity as a brewer on an even pace with the increase of sales. Thousands who had been in the habit of keeping the stronger liquors in their cellars began its exchange for the mild and delicious lager. Gottfried Krueger was one of those men who had the faculty of anticipating, and was always preparing some ready means of meeting the growing appreciation of the merits of lager beer. On the retirement of Mr. Hill on account of sickness, Mr. Krueger became sole owner of the brewery and in the course of fifteen years so rapidly has his business increased that his sales amounted to the enormous quantity of 200,000 barrels annually, a marvelous growth of 600 per cent.

The great and truly imposing buildings in which is housed one of the very best brewing plants in the country stands before the world as an imposing demonstration of the fact in the upbuilding of a business that, "where there's a will there's a way." His



JOHN F. KRUEGER.

TUDGE GOTTFRIED KRUEGER.

GOTTFRIED C. KRUEGER

success in business has thrown around him such environments that he has been powerless to resist leadership and exalted public position. Twice he has been called to represent this district in the State legislature, and for years Mr. Krueger has been the representative of his party on the State Committee

for the county of Essex along with James Smith, Jr., United States Senator, and is now filling a responsible judicial position as judge of the State Court of Appeals. For the past few years he has been most fortunately released from much of his business burthen by his sons, John F. and Gottfried C., who have taken the place of their honored father in the general management of the great brewery and are rapidly developing the same business talents, perspicuity and telling methods of their father. The rich proceeds from Gottfried Krueger's brewing business came entirely from the evolution thereof, its own earnings wrought ont its great developments. No outside cash earned in other branches, entered into, or led up to its prosperity.

JOSEPH HENSLER BREWING COMPANY.

OR nearly half a century the name of Hensler has been a familiar one in connection with the brewery business in the city of Newark. As will be seen by a reference to the brewing industry record, the name of Joseph Hensler, the founder of the Hamburg Place Brewery, will be found to stand out very prominently as a promoter of this rich repaying branch thereof, and wherever the mild exhilerating beverage which is the output of Newark breweries is known or used, the name of Joseph Hensler is a familiar household word. On this page our artist has presented a beautiful illustration of the plant of this Hamburg Place brewing establishment and malt storing house. From the vaults of the brewery, which is so elegantly delineated by the artists and so attractively placed upon these pages, has gone forth some of the most delicious malt products that

ever tickeled the palate of the connoisseur. Here, Joseph Hensler, the founder, who is a thoroughly educated brewer and well up in theory as well as practice, has gathered all the very best and most modern improved appliances and machinery, which have been invented or discovered as help meets in conducting the



JOSEPH HENSLER, SR.



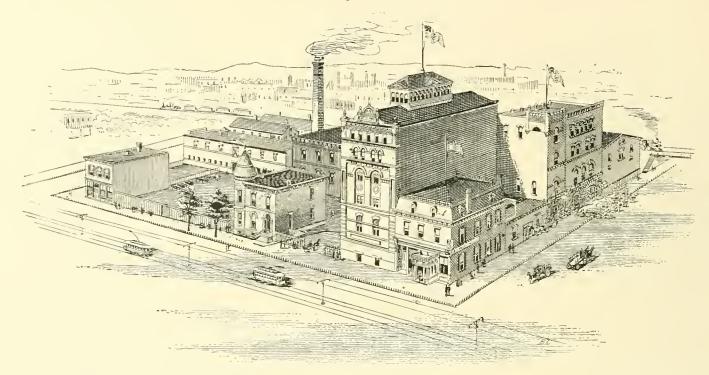
PLANT OF THE JOSEPH HENSLER BREWING COMPANY.

manufacture of lager beer, as well as all other malt liquors. From very modest beginnings Joseph Hensler has gone on under the impetus of his own inate brain and will, from one grade of success to another, until the finished work stands before him to-day in one among the most complete breweries of the country with a patronage from among the best, who have ever been charmed with the cool effervescing draught which so pleased the fancy and brought forth the world-wide recommendation of good old King Gambrinus. The immense vaults which are kept at a low temperature by the latest improved ice or frost bearing machines are kept full of lager (layer) beer from whence, when in the best stage of its ripened age it is taken forth to the dispensers and consumers, in kegs, barrells, etc., on the immense wagons drawn by the finest Pennsylvania horses and which, when moving away from the brewery yards, act as a peaceful reminder of a supply train of an army in motion. This brewery has at the present time an output of quite 75,000 barrells per annum.

Joseph Hensler though of a quiet and unobtrusive nature has always been ready to act well his part in public affairs and on a number of occasions has responded to the call of his fellow citizens and filled places of trust and honor, and always with credit to himself and satisfaction to the constituency.

For the past ten years his business burthens have been materially lightened by his sons, who have to a great extent relieved their father, with whom they are equally interested in the brewery, and who have become practical educated brewers and are wide-awake, go-ahead business men.

The example set by Joseph Hensler, the father, as a business man and citizen, is being followed to the letter by the sons, who are now his trusted associates in the business, and are proving by their daily walk, how easy it is for young men born in luxury and trained amid plenty, to be exemplifiers of the higher walks, and in the very best lines of business life and good citizenship. Few young men in business life are starting off under brighter auspices, or are proving themselves more worthy of the respect and confidence of the social or business world. The name of Hensler has been for years the synonym of generosity and a loyal upholder of the spirit of progress.



GEORGE W. WIEDENMAYER'S NEWARK CITY BREWERY, MARKET, CHAMBERS AND FERGUSON STREETS.

WIEDENMAYER'S NEWARK CITY BREWERY.

N THE site where George W. Wiedenmayer has his flourishing Newark City Brewery, the making of lager beer has been carried on with varying success since 1850. The brewery had been run in a small way till on January 1, 1879, when the present proprietor, (whose father, Christopher W., was one of Newark's pioneer brewers), purchased the plant and took possession. Under his management and guidance the brewery has steadily grown until it has a capacity of 75,000 barrels annually, and with a constantly increasing trade and demand for its justly celebrated product, which defies competition for age, purity and brillancy.

Along with the many other important additions and improvements he has lately made, is the erection of an attractive and commodious building in which are his pleasant offices, where the business is transacted and where he receives his friends and acquaintances. He has also erected a large five story storage building, 40x65, with a capacity of 20,000 barrels, which can be kept at a regular temperature by the most modern refrigerating machines. Beside the very best cooling apparatus, Mr. Wiedenmayer has gathered into his brewery all the very latest and best improved machinery and appliances for making beer to be found in the country, and has added stables with a stabling capacity for thirty-six horses, in fact he has remodeled the entire concern in the past few years. His brewery now covers the entire block bounded by Market, Chambers and Ferguson streets, with the rear resting on the Central Railroad presenting unrivaled accommodations for receiving materials and shipping product. He bottles the product on the spot and makes a specialty of the finer grades of lager beer. He also brews large quantities of rare ales and porters, which find ready customers among consumers. Besides being a successful business man and financially sound, Mr. G. W. Wiedenmayer has ever been ready to act



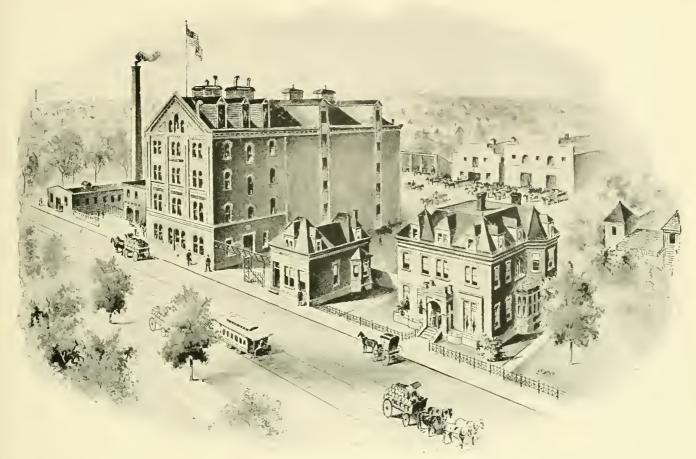
GEORGE W. WIEDENMAYER.

well his part as a good citizen. Twice has Mr. Wiedenmayer been elected to represent his ward as Alderman in the common council of Newark and during his four years term was its popular presiding officer the last two years. In 1889, he represented his district in the State Legislature, with honor to himself and to the satisfaction and credit of his constituents.

His eldest son, George C., is a help meet, indeed, to his father. He is a practical brewer and has perfected himself in the science by taking a course in the United States Brewing Academy, of New York city. On this page of Newark, N. J., ILLUSTRATED is seen a beautiful illustrated plate of his brewing plant as well as of himself and son.



GEORGE C. WIEDENMAYER.



PETER HAUCK'S HUDSON COUNTY BREWERY, HARRISON

PETER HAUCK'S BREWERY.

THE real business grandear which hovers around the immense brewery plant, situate just over the Passaic River, which has really made itself felt, as well as seen, in the beautiful illustrative picture which the artist has furnished for this page of Newark, N. J., Illustrated, can be best understood by those who are acquainted with the large-hearted proprietor, Peter Illauck, whose photo appears on this same page. A full realization of all the extensive plant in reality can best be had by a study of the illustration and a visit to the institution, where the genial proprietor is always ready to grasp the hand and chaperon the visitor through the industrial establishment over which he so successfully presides. Here, as he circulates through the establishment, the visitor will hear the mystery of the process unfolded, and the part he plays in the work and management of his great brewing industry, far better than in

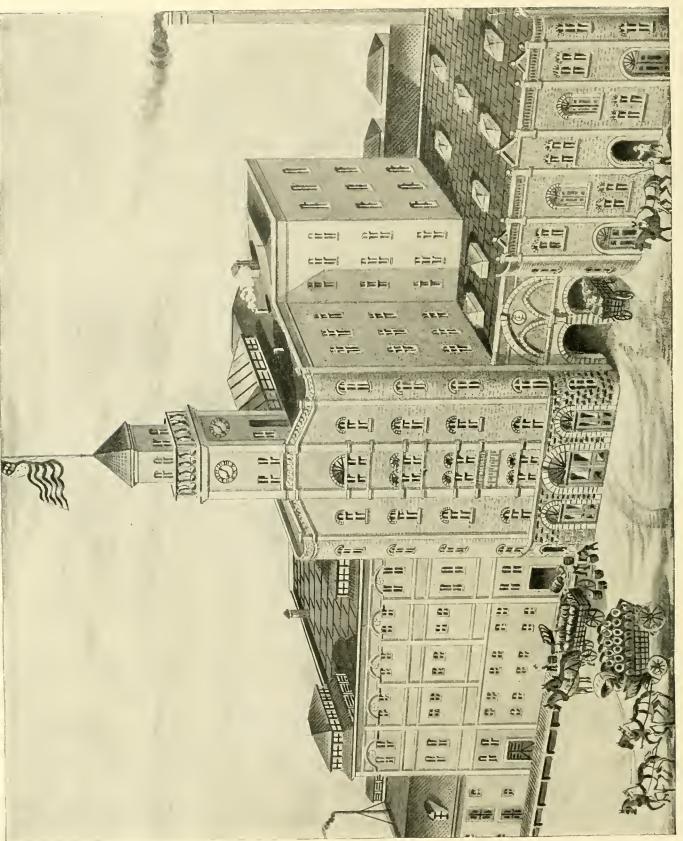


PETER HAUCK.

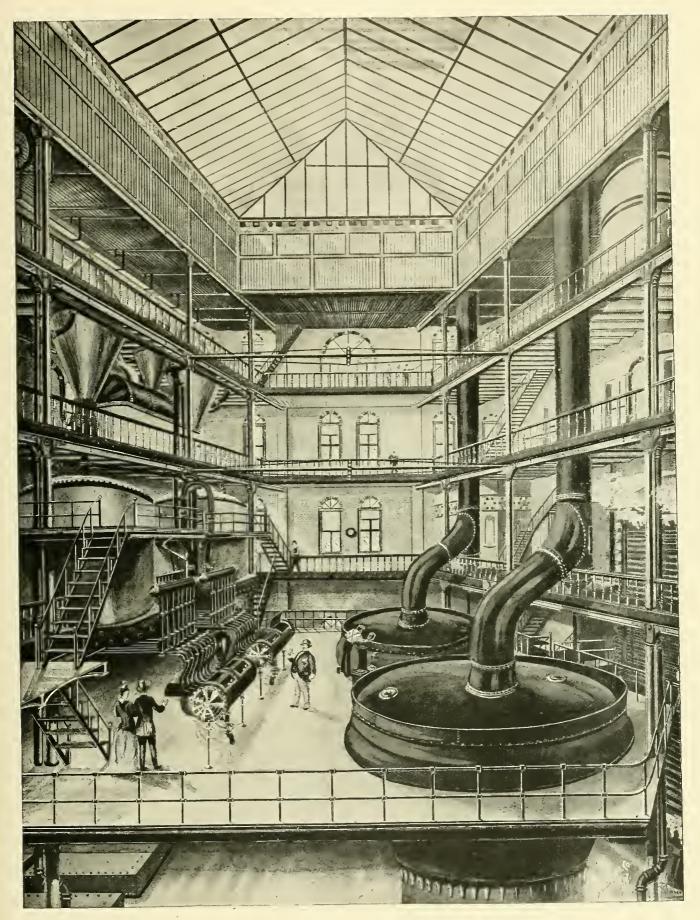
any words or paragraphs of the readiest writer. Every line of his wide open face and every flash of his keen bright eyes, speaks a language not to be misinterpreted. Although all things about the great brewery go on like clockwork, and move with the same apparent ease as a highly perfected and smoothly polished piece of machinery, under the guidance of his master mind and educated hand, it hasn't always been fair weather sailing with the veteran brewer of the sparkling lager over in the Harrison section of this great industrial centre. It's only a few years since the ruthless fire crept into his breweries and swept away the work of years, in six hours time, but Peter Hauck was not the man to lie down and despair over his loss, but with that same old spirit which animated him when his career was young, he set to work to retrieve his fortune. All his energies were brought to bear on the work of reconstructing the plant, and building up his business, and in a very short time greater buildings and more imposing, and the very latest improved machinery, and the very best appliances used in the industry, had taken the place of the old and fire relegated brewing accessories, and again Peter Hauck was on the high road to success.

In the vaults the ice king is forced to reign under the whip and spur of De La Verne and the help of his mystical frost ruling ice machines. The figures giving the number of barrels in total as more than 100,000, is the output of Hauck's brewery. It is always a pleasure to visit Peter Hauck's establishment, but infinitely more so when Peter himself acts the part of conductor.

Not an unimportant part of the industry is found in the malt and hop storage departments, where these two great and indispensable adjuncts to the industry of lager beer making are found in immense quantities.



THE AND BORTER REF.



INTERIOR VIEW OF CHRISTIAN FEIGENSPAN'S BREWERY.

CHRISTIAN FEIGENSPAN'S BREWERY.

FROM almost any standpoint where the elevation is sufficient for the eye to sweep the great city, contarnal above it. sweep the great city, scattered about in different sections are seen huge structures, many of which tower among their neighbers and look very like giants among pigmies. These buildings to which particular reference is made here are the immense breweries and beer-making establishments or malt houses, their absolutely necessary concomitant.

One among the larger and more imposing of these is seen away to the eastward from the corner of Broad and Market streets, and towering high over its neighbors, is the brewery of Christian Feigenspan, which has the enormous manufacturing capacity of 400,000 barrels of beer a year. It is saying nothing in derogation of its grand neighbors, when we speak of it as a superb work of architecture. Here this princely brewer manufactures his famous Export Lager for bottling, which won the silver medal at the Paris Exposition, and has since gained for him a world-wide reputation. Like the fabled Phoenix of mythical lore, this great building rose from the ashes of its unfortunate predecessor, which a few years since yielded to the fatal embraces of the fire fiend, but which now, as rebuilt, towers high above its neighbors, being no less than 160 feet from sidewalk curb to top of flag-staff. From the four sides of the great tower, at the height of more than 100 feet, as many excellent clocks show their smiling faces, and from the brazen tongue within speak in far resounding tones the time of day or night, as the hours roll by. At this dizzy height, just where the great stairways end, is arranged an observation room and balcony, from whence the courageous and level-headed may get a bird's eye view, not only of the city of Newark with its mighty industrial field in all its marvelous grandeur, but the beautful Oranges and the ribbon like Orange mountains as well. Indeed nearly all of old Essex can be taken in



(HRISTIAN FEIGENSPAN.

from this elevated look-out station. On the two preceding pages are seen elegant illustrative views of this model concern, to which attention is particularly called, as well as to the photograph of the above grand whole-souled brewer, Christian Feigenspan, himself

JOHN IFFLAND.

S TRUE to life has our artist made this picture, that having once seen John Iffland, the popular caterer of 183 Market street, you would at once recognize the fact that the phenomenal original was before you. The large class of business men who gather for lunch or refreshment proves conclusively that some men are born caterers, and that John Iffland is one of them. Mr. Iffland was born in Nassau on the Rhine, Germany, and came to this country at the age of twenty-five, in 1866. In 1868 he located on Market street, and purchased the old stand of the late Frederick Waldmann in 1870. In 1872 he took charge of the well known premises which he still occupies, and set to work in his own peculiar way, to please the people and build a fortune for himself and a home for his family. All of these things he has accomplished in royal style. His only recreation has been found in music and song, and in mutual good fellowship to be found in Eintracht, Arion, Aurora and other singing societies, and as a member of the Turnverein. He has not been averse, at the proper season of the year, to splash the mountain stream or skim the surface of the silvery lake, because he always was piscatorially inclined, and not a few elegant specimens of the finny tribe have yielded to his Waltonian-way allurements. It is said that Mr. Iffland has a decided genius for the rod and line.

JOHN IFFLAND.

I. G. HOOPER.

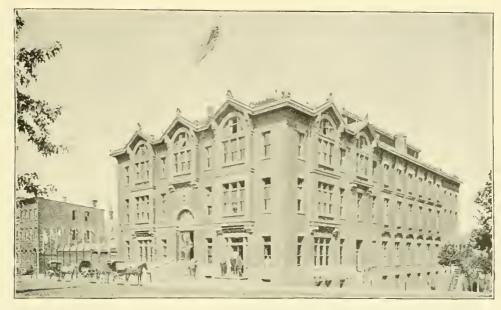
MR. I. G. HOOPER, whose draughting rooms are in the beautiful Credit System Building, at the corner of Market and Washington streets, is an architect of remarkable ability, and a man of much culture. Mr. Hooper makes a specialty of brewery and house architecture, and he has in Newark some very excellent examples of his handiwork. One of these is the grand new brewery of Christian Feigenspan, several speaking illustrations, bird's eye exterior and interior, of which are found artistically transferred on these pages. The beautiful lines of the building from foundation to cope stone, speak a language of praise for Mr. Hooper's ability which no words of ours, however tersely written, could make more fitting or deserving.



IRVIN G. HOOPER.

BEDA VOIGT.

WANT had long been felt in the South-western portion of our city, or what could be more especially designated as the old thirteenth ward portion, which is largely built up with the homes of the German population, for a public hall or place where the people might gather for instruction, pleasure or recreation. First and foremost in all good works and with an eye farseeing enough always to discover the wants of his brethren from the fatherland, Judge Gottfried Krueger, in order to supply this want and keep the section of the city in which was located his home and immense brewery plant on an even footing with other sections, conceived, planned and built the beautiful and capacious Sænger Hall, on



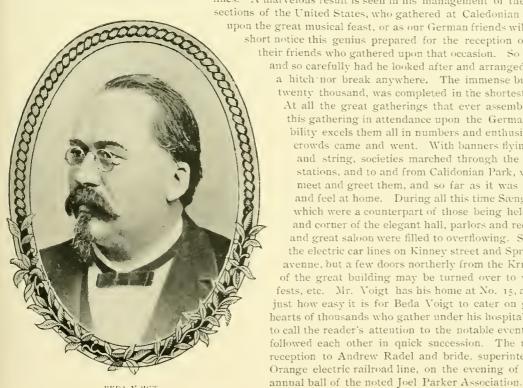
S.ENGER HALL, BELMONT AVENUE.

Belmont avenue, a very striking picture of which forms one of the pleasing illnstrations on this page of Newark, N. J., ILLUSTRATED. In rearing this beautiful structure, which is built of brick with brown stone from the Belleville quarries for trimming, he had an eye single not alone to the glory of the building itself, which is truely imposing as it speaks out from the half-tone engraving herewith given, but for the comfort and welfare of the people of that section of the city wherein it was located by the generous hearted Judge.

Sænger Hall is particularly fortunate, not alone as the hall enjoying the favor of the open hearted builder and owner, but also because of its good fortune in having as its manager the marvelously successful and well-known caterer, Beda Voigt, Esq., who took charge when its doors were thrown open and has continued to conduct it ever since. For more than a quarter of a century, this prince among caterers has gone on in the even tenor of his way, making every body who called at his hospitable doors happy, and ever adding new fame to his increasing reputation as a caterer. For years at Union Park, he pleased the thousands who gathered under his roof and about the tables in the open ground and beneath the shade of the wide spreading trees therein. Not this alone, but the genial gentleman who knew everybody and everhody knew him, made happy the thousands who sought recreation at the Caledonian Park. A glance at the striking likeness on this page, the photographer with rare skill has made a picture of Beda Voigt so perfect and life-like that whoever has seen the original will not fail to know for whom the picture was taken. A full demonstration of Beda Voigt's ability in the line of his callings of caterer and manager are seen in the results of his past efforts in these

lines. A marvelons result is seen in his management of the great crowds of people from all sections of the United States, who gathered at Caledonian Park in July, 1891, in attendance upon the great musical feast, or as our German friends will have it, "Sængerfest." On very short notice this genius prepared for the reception of the grand army of singers and their friends who gathered upon that occasion. So perfect were all the arrangements

and so carefully had he looked after and arranged every detail thereof, there wasn't a hitch nor break anywhere. The immense building, capable of seating nearly twenty thousand, was completed in the shortest time ever given to such a work. At all the great gatherings that ever assembled in this great industrial centre this gathering in attendance upon the German Sængerfest of 1891, in all probability excels them all in numbers and enthusiasm. For nearly a week the vast crowds came and went. With banners flying and bands playing, both brass and string, societies marched through the streets, to and from the railroad stations, and to and from Calidonian Park, where mine host would be ready to meet and greet them, and so far as it was possible to make all comers happy and feel at home. During all this time Sanger Hall was the scene of festivities which were a counterpart of those being held at the Caledonian. Every nook and corner of the elegant hall, parlors and reception rooms, the summer garden and great saloon were filled to overflowing. So conveniently is the hall situate to the electric car lines on Kinney street and Springfield avenue, at No. 25 Belmont avenue, but a few doors northerly from the Krneger brewery plant, that all parts of the great building may be turned over to visitors at times of balls, parties, fests, etc. Mr. Voigt has his home at No. 15, a short distance away. A proof of just how easy it is for Beda Voigt to cater on great occasions and make glad the hearts of thousands who gather under his hospitable roof at such times, we've only to call the reader's attention to the notable events of but a few weeks since, which followed each other in quick succession. The reception to Governor Abbett; the reception to Andrew Radel and bride, superintendent of the Newark and South Orange electric railroad line, on the evening of his marriage, and lastly the tenth



REDA VOIGT.



JUDGE JOHN OTTO.

JOHN OTTO.

NO MORE familiar face to the averagely well-acquainted Newarker is there to be seen than that of Judge John Otto, a photo of whom is fixed upon this page. For years he has handled the baton of Justice, either as Justice of the Peace or Police Justice at the station. Ever since its first organization, Judge John Otto has been president of the German Pioneer Society, which numbers among its membership nearly all our oldest and most highly respected German fellow citizens. Justice Otto has business offices at No. 2 William street. He is president of the Gottfried Krueger Pioneer Greisenheim, and a director of the Newark German Hospital.



JOHN WEGLE.



A. A. SIPPEL.

A. A. SIPPEL.

MONG the citizenship of Newark few have made themselves better known and are more worthy of a full meed of praise, than Mr. A. A. Sippel, who has conducted a large painters' supply store on Market street for a quarter of a century, and the photo of whom appears on this page. In the conduct of his business Mr. Sippel has been marvelously successful. His is but another of those examples among the thousands whose honesty, truth and justice are the good man's characteristics, and have been the landmarks that the happiest of results have accrued from following. Perception and benevolence, the phrenologist would declare, after looking long and intently at his picture, are the leading traits of his character. As a friend and supporter of the benevolent institutions for which Newark has long been noted, he has been foremost, and for many years has been in the direction and secretary of the German Hospital Association, an institution which stands high in its work of beneficence. In its works of charity the institution has found its supplement in the private endeavors of the large-hearted secretary.

JOHN WEGLE.

EX-ALDERMAN JOHN WEGLE, whose photograph is seen on this page, is one of Newark's highly respected business men and citizens. Mr. Wegle is a son of the German fatherland, but an American at heart and a Newarker from choice. For many years he has conducted a large grocery business at No. 96 Mulberry street, at the corner of Commerce, and has his home at No. 222 Mulberry street. John Wegle is a man of sterling integrity, and his word is his bond. He is held in high esteem by his neighbors, and although he has always been averse to holding office, he has represented his ward in the Common Council of the city, and always with credit to himself and satisfaction to his constituents.



GENERAL WILLIAM WARD.

THE PATRIOTISM OF HER PEOPLE.

ED on by patriotic influ ences of the loftiest type, the forefathers who came to plant the seeds of liberty on the banks of the Passaic in the wilderness of New Jersey, and to build their new homes far away from despotic and oppressive ways, were true patriots. When these brave men had finished their course, and kept bright through all the vears of their own virtuous sojourn, they bequeathed to their children the same height, depth and love of patriotism and independence of spirit which they had kept as the apple of their eye. That their children, who were left in possession of such rich boons, have been true to the trust the fathers imposed, is



MAJOR WILLIAM WAKENSHAW.

seen in the results of their achievements. The lessons taught by those hardy pioneers who stood by the flag of Capt. Robert Treat and his associates, as with sturdy valor they held it aloft while dealing in honor with the Indian possessors, and while justly paying, according to agreement, for the land they bought. As their followers came with brawn and brain, they set to work, to help dig and delve, to assist in devising and maintaining the new settlement that had within it the bud of promise of the mighty unfolding of the present. They readily fell into line as they came, and willingly bent their backs to the burthen. Together they worked, and together they played. Yes, played; for in the days when Newark was young, Military and Washington Parks, and the cleared fields surrounding their unpretentious homes and dwellings, were improvised gymnasiums, where old and young gathered when the hours of toil were ended and tried their skill with Indian bow and arrow, pitching the quoit and hurling the round stone and light and heavy hammer. They tested their strength in lifting the weight, and their speed in running, to finish the fun in a rollicking run or test their strength and skill in turning, or an innocent bout in a friendly wrestle was not uncommon. In the knowledge of the grand old combination of the church eatechism, the plow and the anvil, were the upbuilders, promoters and defenders of this metropolitan city of New Jersey and cosmopolitan Newark. Although so very near New York, the empire city, as to feel the touch of her outreaching tenacula, and on the direct line of travel from Philadelphia, the East and the South, hers remained an independent position, and as she increased in bounds and population, and as her industrial interests grew, the patriotism of her people kept pace. Not alone did Newark grow and expand under the influence and natural increasing of those to the manor born, but each succeeding year the influx of strangers, mechanics, artists and skilled workmen came, to contribute their part to the growth of this typical industrial centre. The capitalist came to locate the factory and the mechanic to seek the ready employment offered. They came from away over the ocean, from the East, the West, the North and the South of the young American nation. Every county of this State furnished her quota, but the largest may be credited to old Sussex. They came self-reliant and ready men, the major part with nerve, brain, muscle and good will, and as Newark grew they grew, all standing ready on call to rally and defend. "United we stand, divided we

fall," was the motto of one and the fiat of all. In the words of the immortal Emerson, when the news was heralded from Lexington and Concord, that the New England farmer "had fired the shot heard round the world," no city and no State lifted higher the flag of resistance to British oppression, nor made greater sacrifices, or suffered more than the city of Newark and State of New Jersey. The hearts of her citizens were fired, and the burning grew brighter as the revolution went on, the final victory won, and independence acknowledged.

Through her streets and highways was heard the tread of marshaled hosts throughout the war, for indeed, through her led the way to the battlefields of Monmouth and Trenton, and the great Washington's patriotic army's camping ground of Valley Forge. The smouldering spark of patriotism in their bosoms needed but the fanning with the old flag borne down by British sailors and insulted by Britains on the high sea, to set it brightly burning, in 1812.

The great battlefields in the war for the Union are marked by the heroic deeds of New Jersey soldiers. The brilliant and valiant service of Generals Runyon, Kearny, Kilpatrick, Birney, McAllister, Mindil, Sewell, A. C. U. Pennington, Jr., Price, Carman, Penrose, Mott, Francine, E. Burd Grubh, Colonels Tucker, Ward, Donnelly, Ryerson, Johnson, Alexander N. Dougherty, Craven, Robinson, Dodd, Halstead, Hunkle, Matthews, Fleming, and Majors Wakenshaw, Morris, Gruett, Beam, Clark, Courtoise, Hexamer, E. F. McDonald, Atkinson, Bowers, and others which space prevents to mention here, but whose names are kept green in memory by their comrades of Lincoln, Phil Kearny, Sheridan, Garfield, Marcus L. Ward, Hexamer and Tucker Posts of the Grand Army of the Republic located in this city. The military spirit is maintained by a well disciplined regiment of National Guards and the Essex Troop.



MAJOR WILLIAM F. MORRIS.



WILLIAM B. WILSON

ORDER OF CHOSEN FRIENDS.

THE Order of Chosen Friends is a fraternal, benevolent, protective society. It was first established May 28, 1879, in the city of Indianapolis, Indiana. It has about 800 subordinate councils and 45,000 members, twenty-three of these councils with 1,800 members are located in Newark. The order makes provisions for paying in addition to sick and death benefits, one to its aged members, and also providing for a benefit to those who become totally disabled by reason of either disease or accident. During the thirteen years of its existence it has disbursed over \$6,000,000 to its disabled members, and the widows and orphans of its deceased members. Its office in Newark is located at No. 787 Broad street. Mr. William B. Wilson, whose photo is given herewith, is Supreme Assistant Counselor of the order.



THOMAS GALLACHER,



J. B. FAITOUTE.

GOLDEN STAR FRATERNITY

THE Golden Star Fraternity is a social, fraternal and beneficial association, and incorporated under the laws of the State of New Jersey, January 21, 1882. The incorporators were residents of the city of Newark and well-known among the business community, hence it is absolutely a home institution.

Its objects are to promote industry, morality and charity among its members, and to provide and establish a beneficiary fund from which, on satisfactory evidence of the death of a member a sum not exceeding \$2,000, shall be paid to the legal beneficiaries. Acceptable persons between the ages of 17 and 56 years are admitted to membership. The assessments range from 30 cents to \$1.18 per \$1,000 insurance, and from the organization to the present time, the average assessments have been less than 8 per annum. No sensible man can deny the fact, that it is his moral duty to make some provision while in life and good health, for those he may leave behind him, and the question naturally arises, where and how will he do it. The Golden Star Fraternity provides the way. Any information concerning the fraternity will be gladly furnished by J. B. Faitoute, Supreme Secretary, No. 22 Clinton street.

THOMAS GALLACHER.

THOMAS GALLACHER, a photo of wnom is herewith given, is a well-known citizen of Newark, having been prominently_identified with the fraternal, building and loan and charitable organizations of the city, has for a number of years served with credit as the secretary and president of the State Council of the Catholic Benevolent Legion, an organization devoted to the conservation of the family, incorporated under the laws of the State of New York, in 1881. He is also secretary of the Howard and Enterprise building and loan associations, and has for a number of years taken a great interest in this kind of work. For several years Mr. Gallacher has represented St. Michael's parish among the lay trustees in the board of directors of St. Michael's Hospital, and during the past fifteen years has had charge of the office work in the Chapin Hall Lumber Company, of Newark, New Jersey.

ALEXANDER P. HOLBROOK.

father in the conduct of his work. His photograph is seen on this page.

A. P. HOLBROOK.

NE among the many excellently equipped printing establishments in the city of Newark is that conducted by the Holbrook Printing Company, at Nos. 11 and 13 Mechanic street. Mr. A. P. Holbrook, the popular superintendent, is a Newarker to the manor born, and comes from royal stock, his father having for years been prominent in business and public affairs-a man honored, respected and trusted by all who knew him. Mr. A. P. Holbrook is building upon the same solid foundations, and measuring up his life-work by the same golden principles which animated his



JOHN M. GWINNELL.

JOHN M. GWINNELL.

THE subject of this sketch, Mr. John M. Gwinnell, is an old Newarker and a man highly respected, honored and trusted by his fellows. Mr. Gwinnell is in business at No. 50 Mechanic street, and has his home at No. 55 Halsey street. That the readers of this art work and the students of the pictures of its industrial places, and photo, likenesses of its citizens may know somewhat of the manner of man John M. Gwinnell is when they look upon his picture, we will only say that he is connected with several of our banks as president and director, and has been for several years a prominent leader in the benificent institution known as the Legion of Honor. He held the position of treasurer, which imposed large financial responsibilities, requiring no small degree of financial ability, acumen, good judgment, firmness and care, all of which he has demonstrated to be the possessor of, to the satisfaction of his associates of the Legion, having disbursed twelve million dollars without the loss of a single dollar.

KNIGHTS AND LADIES OF THE GOLDEN STAR.

THE Supreme Lodge of the Knights and Ladies of the Golden Star was organized November 28, 1883. The officers for 1893, are John L. Armitage, Supreme Dictator; F. A. Sherwood, Supreme Past Dictator; S. M. Mattox, Supreme Vice Dictator; J. F.



SAMUEL P. LACEY.

Dodd, Supreme Orator; Samuel P. Lacey, Supreme Secretary; George W. Downs, Supreme Treasurer; F. W. Duncker, M.D., Supreme Medical Examiner; Joseph Kay, Supreme Chaplain; John C. Moehring, Supreme Guide; John A. Feindt; Supreme Assistant Guide; Dr. Leo Th. Meyer, Supreme Warden,

The objects of the order are fraternal, moral. educational and beneficiary. The methods of building up the order are by the organization of subordinate lodges, beneficiary aids, prompt payment of total disability and death claims. The order is eminently conservative, simple, honest and inexpensive in its business methods, the main object being the protection of its beneficiaries. It has earned the reputation of being one of the most prompt paying orders in this or any other country.



DR. FREDERICK W. DUNCKER.



A. R. HINDS

A. R. HINDS

THIS gentleman, who is thoroughly well-known to the Newark public who are musically inclined, succeeded to the business on the death of his father, Silas P. Hinds, who conducted the music and piano warerooms at Mr. Hinds' present location, Nos. 21 and 23 Bank street, for more than forty years. Like the senior, Mr. A. R. Hinds is a musician, and continues the business of supplying the public with music and musical instruments of all kinds as well as pianos, organs, etc., not only of his own make, but of many of the most popular makers in the country. Mr. A. R. Hinds is one of those men with whom it is a pleasure to transact business. He is a believer in the golden rule and is always ready to practice it.



JOSEPH THOME.



отто к. венил

OTTO K. SCHILL.

T REQUIRES but a single glance at the striking likeness of Mr. Schill, which our artist has so successfully transferred to this page, to satisfy any one who has the least smattering of phenological science that he is musically inclined and that music is as naturally his bent, as poetry is that of the poet born. The studio of this genius is at No. 22 Clinton street. Here he devotes his time in giving lessons to those desiring to learn the art of playing the soul entrancing violin. While Newark can boast of many excellent artists, she has few, if any, who possess the qualification to impart their knowledge to others above Otto K. Schill. Mr. Schill is one of those painstaking, untiring and devoted teachers, whose highest ambition is to turn out artists who will be a credit to his skill and an honor to his institution. Mr. Schill resides at No. 44 Nelson Place.

JOSEPH THOME.

JOSEPH THOME, whose photo is herewith given, is leader of the Newark Zither Verein arraying in the Newark Zither Verein arraying the Newark Zither Verein array in the Newark Zi a practical musician on numerous string instruments and devotes considerable time to the art of zither playing. He is also an author, having composed several pieces for that instrument which have been published and used for the piano as well, the "Town Talk Schottische," being one of the number. The store is situated on Springfield avenue, near High street, where he keeps a stock of musical instruments for the trade generally, and a full supply of sheet music for the zither and piano, violin, banjo, etc. Mr. Thome is a young man and is devotedly attached to the musical calling. He touches his favorite zither with rare skill, and all who have had the good fortune to hear the delicate notes and to witness with what peculiar deftness his educated fingers fly over the strings of this soul stirring instrument of music, have enjoyed a musical feast that few performers are able to prepare. A single glance at his photo will convince anybody that music is the bent of his genius. Not a few performers who are making rapid progress in the zither playing art feel grateful for the help he has given them.

CHARLES W. COMPTON

MONG the numerous professions there is none of more importance than that of the funeral director. Following this business, there is no name better known to the citizens of Newark than that of Mr. Charles W. Compton, whose place of busines, photo, of himself and residence, form the illustrations on this page. His complete establishment, located at No. 216 Market street, was one of the first iron front buildings in the city. Everything requisite for the busines is provided, and the houle is a varied and extensive as any in the country. Mr. Compton is a Ne varket. and by trade a cabinet matter and undertaker. For thirty-six years he has officiated at thousands of funeral. imposing pageantry which dre viva t numbers of people to witness the funeral rites attendant upon the burial of some noted person. In all fellow citizens for the marked kindness displayed. The majority of improvements adopted in the profession have been introduced by Mr. Compton, the most important of which is

the child's hearse, which has been in universal use throughout this country for more than thirty years. Prior to that time he realized the danger attendant upon carrying in coaches the remains of children who died from contagious disease, and was the first to design and make use of a separate conveyance espec-



RESIDENCE & HAPLE W . O. G.S. . O'TH SELE IL PEET.

ially adapted for that popose. No act of a clong bone life has given him more real credit nor in falt none more really meritorious than their troduction of this hear e.

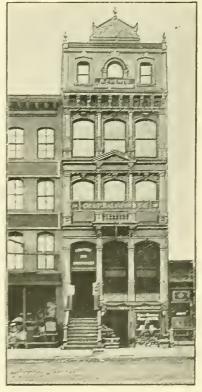
Charles W. Compton is one of the lest known men among the

business characters of Ne varz. nor have -'atec. his business ket treet, is where he all li-life as hi-

in the perfor, ance of and allewiated the mournful situation atdisposing of their dead. In his earlier -".: or pleasure, and gatherer a fand of anordeage at the has often used most



CHARLE- W. T MPT T



C. C. MURRAY

EW indeed, among the many beautiful and artistic illustra tions in this book of gems, show more clearly the high order of photographic skill made manifest in every resultant picture, than this, where the home and business plant of C. C. Murray has been transferred to these pages of Newark, N. J., Illustrated. It is a fact that goes without the saying, that the photographed results to be obtained through the argus eye of the relentless and close-peering camera, must be of the most perfect, bold in outline and searching in character, before it is fit for the hand of the artist who transfers it to the plate, so that no question as to its merits shall ever arise. In the first place, unless its every line is raised in clearness no good results can be obtained in its transference. It is evident, as will be seen at a glance, and all will be sustained after the closest and most critical study of the result as seen in the picture under consideration, of Mr. Murray's elegant residence and undertaking business plant, all combined under one head, as spread before the reader on this page. Not alone have the artists, one and all, excelled in each of their individual departments or lines in producing such an attractive and truthful delineative picture, but they have given the reader a chance to study the manner of man Mr. Murray is, as his face speaks out from its retiring place on this page. Any one who has had the pleasure of seeing Mr. Murray and transacting business with him, will see at a glance that the picture represents him admirably, and gives a starting point to that marvelous success which has marked his career as a business man and gave him such a standing. From every mark seen around his face and head speaks out those characteristics so necessary to the successful business man, giving proof of his possessing the elements of character which have led up to the happy results which we shall endeavor to so depict in the few words following, that "he who runs may read." That Mr. Murray had no special training for the work in which

he is engaged, is known to everybody who has the pleasure of his acquaintance, and he has very many of them, and has as wide a friendship and as close an association with those whom he loves to meet and their society enjoy in his own peculiar way, as any other business man of his age. Any one who has the least smattering of phrenological science, or has tried his hand at studying character from the facial standpoint, would see at once, as they scanned his wide-open countenance standing out in the illustration, plain and



C. C. MURRAY.



C. C. MURRAY, UNDERTAKER, CORNER WARREN AND HUDSON STREETS

clear, that his predominating characteristics are benevolence and cautious kindness of heart, and perseverance, the latter ever ready to come in to assist in overcoming difficulties, while the others give him first, a hopeful spirit and a sympathizing nature, and

second, an unselfish but careful way.

In the spring of the year of 1892, Mr. C. C. Murray, the undertaker, had erected on the plot of ground at the corner of Warren and Hudson streets, elegant new buildings in which to conduct his rapidly growing business. To its present proportions has the undertaking business grown in Mr. Murray's hands from very modest beinnings. Thirteen years ago, in the year 1880, Mr. Murray began business at No. 14 Hunterdon street. From thence in 1881, he removed to No. 295 Warren street, where he remained until the completion of his imposing edifice into which, after furnishing it modestly and becomingly, he removed in 1892, as above stated.

In looking about for the causes which are to be held responsible for the happy results which have followed thick and fast on his successful career in the undertaking business, it will easily be seen in the character of the surroundings of everything in his neat and attractive place, which has little, indeed, of the somber character usually attendant upon undertakers' concerns, but principally in the honorable character of the man himself, always ready at call to serve the rich and poor alike, with a ready tact, a pleasing way and soothing manner, he ever attracts and seldom if ever repels. A friend to the friendless, and always by kindly words instilling hope and dispelling despair, his kindliness making friends on all sides. With such a combination which always leads up to integrity in business, we have an easy solution of the question of the gratifying success which it is always a pleasure to record.



VIEW IN FAIRMOUNT CEMETERY.



CHRISTIAN VOLZ

FAIRMOUNT CEMETERY.

IT IS ever a pleasure to call attention, as well as to scan the beautiful, but it becomes doubly so in this connection, where the artist who photographed the picture on this page brought his camera to bear upon a spot where Nature had been lavish of her compliments of beauty before man had adorned it with his skill. Here is seen a part of that particularly well cared for city of the dead known as Fairmount Cemetery, where sleep so many of those who were once citizens of Newark. The view from which the picture was taken covers that portion of the cemetery upon which stands the famous Clawson monument, which shows up so beautifully, and is said to be the most attractive as well as one of the most costly monuments in the State of New Jersey.

CHRISTIAN VOLZ.

A THOROUGHLY complete establishment for the conduct of a general furnishing undertaking business, is that of Christian Volz, at No. 40 William street. In connection with his undertaking business Mr. Volz has a large number of coaches, drawn by excellent horses and handled by careful drivers. Mr. Volz's residence is at No. 44 William street, near by. Thus provided with every necessary for the undertaking business is ever in readiness to conduct funerals in the very best manner and on the most reasonable terms. He has competent assistants and while always polite and painstaking himself, he sees to it that those he employs shall be the same. His line of goods is of such a general character that he can satisfy all comers and supply every want and demand. On this page is seen a photo of Mr. Volz, which is indeed lifelike and natural.

M. A. MULLIN.

EW liverymen in Newark have met with greater success in their calling than the enterprising citizen whose ideal livery stable forms one of the illustrations herewith given. The establishment is one of the most complete and best equipped in the city, and is another demonstration of what push, enterprise and perseverance can accomplish. Mr. Mullin is also proprietor of the Standard Cab Company, and controls the largest number of the finest coaches to be found in any similar institution in the State. The plant is thoroughly equipped with every improvement known to the business, and employment is furnished to skilled harness makers, painters and blacksmiths on the premises. Besides being a practical business man, he is ever ready to respond to the call of progress, and devotes considerable time and attention to aquatic affairs. having for several years served as a commodore of the Passaic River Amateur Rowing Association. He also conducts an undertaking establishment on Harrison avenue, and is largely identified with the growth of Newark, of which he is an honorable representative.

E. B. WOODRUFF.

A MONG the undertakers of the city of Newark few have risen to a more deserved prominence than Enoch B. Woodruff, whose offices and warerooms are at No. 846 Broad street. Here at all hours of the day and night he is found ready to respond to the call of those who are so unfortunate as to need the services of an undertaker. An experienced female is always in attendance. For convenience of location the establishment has few equals and no superiors. Enoch B. Woodruff is one of the oldest undertakers in Newark, and is a worthy representative of the calling and a citizen of high standing. His photo on this page is truly life-like and natural.



M. A. MULLIN'S CENTRAL LIVERY STABLE, NOS. 261-265 WASHINGTON STREET.

E. H. STONAKER.

ONVENIENTLY located at No. 944 Broad street and at Belleville N. J., are Mr. E. H. Stonaker's furnishing undertaking establishments, where during all hours of the day and night the public can have all their wants in this line satisfied. With a large experience and a carefully selected stock, he is ready to meet every call. A photograph of the gentlemanly head of this enterprising house is seen on this page.



E B. WOODRUFF.



E. H. STONAKER.



DAVID CODY'S BOARDING AND LIVERY STABLES, Nos. 53 AND 55 EAST KINNEY STREET.

A MONG the main livery stable men who have achieved success in the business is David Cody, the stables of whom are seen on this page, and it will be considered superfluous to say that the picture speaks of them just as they are. Few men ever go into the livery business unless they are real lovers of the horse, and Mr. Cody does not differ from the great majority, since he will have none but the best of stock and the handsomest of turnouts, and what is more and better, he will permit none to abuse the patient animals under his care if in his power to prevent it. His establishment is what is known as the 9th Ward Livery Stable and is situate at Nos. 53 and 55 East Kinney street. Everything about David Cody's stables and carriage houses are neat and tasty. A glance at the picture

will show the most fastidious that he is the right man in the right place.

F. W. MUNN'S LIVERY STABLE

T No. 76 Chestnut street is A situate one of the largest and best conducted livery and boarding stables in the city of Newark and is the home of one of the largest and best cab establishments. Mr. F. W. Munn is proprietor and manager. It is justly due the painstaking gentleman standing at the head of this concern, to say that many of the finest livery turnouts and highest stepping horses are from his stables. The genial Captain Fordham will be found at the day and evening stand, near the corner of Broad, south side Market street, ready for calls.



F. W. MUNN'S NEWARK CAB AND COUPE CO., NO. 76 CHESTNUT STREET.

CLAYTON & HOFF CO.

FEW cities of this country ean boast of larger, better equipped or more honorably conducted establishments, than the rapidly growing metropolitan eity of New Jersey, Newark on the Passaic. When the fact would be presented to the stranger, or one unacquainted with the livery business as conducted in this great manufacturing centre, that Newark supported more than fifty establishments where horses and vehicles can be obtained for hire, he would be startled by its magnitude.

Among these it is our pleasant duty to call special attention in this article to the great establishment conducted by the Clayton & Hoff Co., on Halsey street, near Market. These stables, which are so skillfully transferred to the pages of Newark, N. J.,



CLAYTON & HOFF CO., STABLES, HALSEY STREET, NEAR MARKET.

ILLUSTRATED by our artist, cover the extensive plots known as Nos. 196, 108 and 200 on the ea terly side, and Nos. 217, 219 and 221, on the westerly side of Halsey street and the capacious and roomy buildings erected thereon, within these buildings are comfortably stabbled the more than one hundred horses kept constantly on hand for livery purposes. Among these are many fine appearing equines to haul the elegant buggies, carriages, coaches and landaus, an immense number of which they have in styles and patterns, sufficient to satisfy the tastes of the most fastidious or exacting among the thousands who are their continious patrons. Not an unimportant part of their business arises from the great demand made on their immense resources for supplying on short notice, coaches and drivers for funerals, the former are always clean and sweet and woe betide the driver who rides in the driver's seat of one of Clayton & Hoff's coaches, who is not always polite and painstaking or shows dereliction of duty. One thing is always certain to be found in this establishment, and that is polite attention. An application made for a rig in which to ride, be it for one of their swift steppers or high lookers, or one of their patient, safe and steady plodding dobbins, for they keep every variety, and turnouts of elegance or comfort, common or for a saddle horse to take a gallop on, is always met in a business way, and the want supplied as though everybody was in a hurry. Elegance, care, cleanliness and dispatch are the leading words in Clayton & Hoff's business dictionary. That Newark is fortunate in the class of men who are engaged in the livery business is a fact that goes without the saying and Charles W. Clayton, who is the sole proprietor of the business, is only a representative of this large class of business men engaged in letting horses and carriages in the city of Newark. From very modest beginnings the business of this concern has grown to its present immense proportions under the fostering of this man of pluck and vim, and he can trace his success to the original motto, "determined to please," which has been carried out to the letter, not only by himself, but by all his employees. A visit to the stables is well worth the making by the lovers of the horse and the admirers of the stylish in harness, saddles, carriages



CHARLES W. CLAYTON.

or sleighs, stylish and elegant representatives of either, and all being found in the stables and repositories for vehicles and boudoirs and closets for the harness, robes, blankets, brooms, dusters and the fly nettings, a variety of which are kept constantly on hand for use, when necessity or emergency calls or efficiency demand. Mr. Clayton always delights to show those around the establishment, in which he takes a personal interest and pride, who are in pursuit of pleasure or information as to where is the proper place to procure at a moderate price just such a turnout as they would like when they wish to ride or drive.

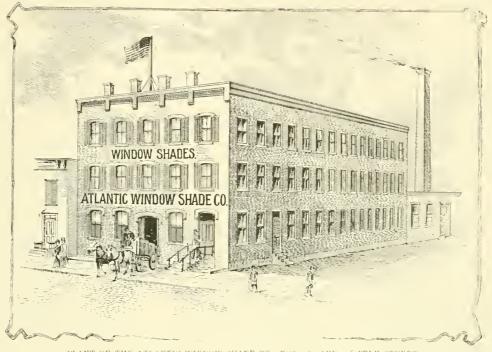
Every year the Clayton & Hoff establishment send out a neat circular notifying the people as far as possible of the greatly increased facilities they have made, in order to please and gratify their old customers and point to others whom they are ready and willing to please. Mr. Clayton is one of those men who believe in having a good thing, the very best the markets afford, and put into exercise the full measure of his push and vim to furnish everbody with "a good horse and carriage for a very little money."

There is little doubt of this being one of the most thoroughly equipped livery stables in the city of Newark. Besides the paraphernalia proper, he has his own blacksmith, wheelwright and harness makers shops with skilled mechanics to operate them, all of which a wide-awake thinking public appreciate. The concern makes a specialty of furnishing horses and wagons separate or together by the day, week or month. Also two and four horse stages for pleasure parties and immense vans for moving, and store rooms for storing furniture. The manner of man Mr. Clayton is may be seen from his photo on this page.

ATLANTIC WINDOW SHADE CO.

THE Atlantic Window Shade Co., which has its home at Nos. 104 and 106 Polk street, a beautiful illustration of the building in which the industry is housed being seen on this page of NEWARK, N. J., ILLUSTRATED, as well as elegant likenesses of Mr. Ferdinand Grebe, the treasurer and general manager, and Julius Philippson, the president and superintendent of the sales department. About five years previous to the organization of the Atlantic Window Shade Company, a small business started for the purpose of stamping or printing hosiery, laid the foundations for this now prosperous concern. Indeed, we have in the growth, conduct and success of this business another demonstration of the success which results from push and vim, and the mighty growths of business industries which follow small beginnings.

The buildings are of brick, three



PLANT OF THE ATLANTIC WINDOW SHADE CO., NOS 104 AND 166 POLK STREET

stories and basement, having a frontage on Polk street of forty feet and rear extension of ninety feet, giving a capacity which though capacious enough, apparently, is found in the busy season all too contracted for the demands made upon it, when the thirty-five to forty men, artists, painters and pencilists are hurrying off the tens of thousands of window shades in fulfillment of orders from all sections of the country, where the people have taste enough to adorn their windows with shades, not alone beautiful, but full of utility, which this house turns out in such quantities and such great variety of styles and patterns, some of the latter being simply marvelous and full of attractions to those who are endowed with taste in harmony.

That those who may be so fortunate as to turn the pages of this work of art, may know somewhat of the character and beauty of the window drapings turned out by Messrs. Grebe & Philippson in their Polk street plant, the writer of this brief sketch will endeavor to transfer some of the impressions of the elegant, rich and unique patterns which were shown during a recent visit and short sojourn in the halls where the artists work. It will be well to remember, to start with, that the very best part of the shade decorations are made by the artists skilled in oil painting. To stand for a moment and see the skill with which they transfer their minds, evolution of beauty to the shade, in the beautiful flower piece, or animal, or bird representation, is simply entrancing and holds the visitor spell bound Here is an artist engaged in bringing out in detail on this shade of muslin a flower piece in which the beautiful calla of the Easter season predominates, while on that piece of linen another seems to call forth from the bly pads flowers in full bloom, so true to nature, and as it were, filling the room with the aroma from their great yellow stamens, and snow white petals, two swans so life-like that the ear is bent low as if to hear the notes of their famous life parting song; and here the picture of a squirrel so pretty that one would expect to hear his chirr as he scampers along the pine branch, laden with its seed bearing cones



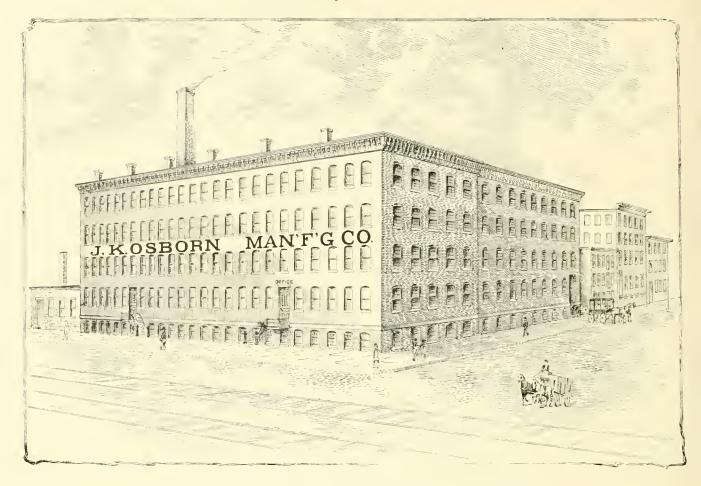
FERDINAND GREBE.

Pages might be used in the description of the rich and varied colors which are made to speak forth in finest tones. The company manufactures its own cloth in an endless variety of tints, from which the shades are cut, and mounted on rollers ready for use.

The growth of this business has been such that nettings of cloth and wire have been added and the printing of these necessaries to these sections of our country, where the blood drawing and life prolonging mosquito loves to dwell, has become an important adjunct to the business. Both gentlemen are Germans by birth, Newarkers by adoption and Americans in heart, and are doing their full share in the work of the upbuilding of industrial Newark.



IULIUS PHULIPPSON.



J. K. OSBORN MANUFACTURING COMPANY.

M. J. K. OSBORN, the president of the J. K. Osborn Manufacturing Company, was formerly of Riley & Osborn, and later treasurer of the Riley & Osborn Manufacturing Company. He is one of the pioneers in the fancy metal goods business in our city. When Mr. Osborn first entered the brass business nearly all the fancy goods made of metal came from foreign shores, but through his energy and skill the trade of fancy brass goods in this country was supplied by his firm, and their production was not only sent throughout the United States, but Canada and the islands of the sea, in fact to every known country in the world, so world-wide had become the name of the old firm. Mr. Osborn has the facilities at the present time to still compete with the trade, and will continue to lead in all that is new and novel in the metal line. In former times all the military metal goods, all bags and satchel trimmings, all umbrella and parasol metal trimmings, all ladies' belt buckles, hat pins and buckles, dress buckles, all society metal goods, cane handles and fernles, inkstands and all fancy articles, such as whisk holders, eigar holders, and in fact all articles in the fancy brass line were brought from England, Germany or France, but through the energy of Mr. J. K. Osborn these things have all been made here, and our buyers make no more costly and long journies across the waters for them, but at home they can find all and much more than ever was imported. This business has developed into such large proportions that the above named concern has recently moved into the large and commodious building corner Hamilton street and Railroad avenue, which every traveler on the Pennsylvania Railroad can see. The building is situated at the southwest corner of the Pennsylvania Railroad station.

There is hardly an industry in this city of teeming thousands, which turns ont a greater variety of products than this in which Mr. J. K. Osborn has been so long engaged, and there are very

few who have better, if indeed any, than this old pioneer of this line of Newark's manufactured products. One thing is very certain, and that is, the goods turned out under his supervision will stand test of comparison with anything turned out of the workshops of the world. The first thing which would strike the visitor as he looks into the great manufacturing establishment, is the air of contentment and the neatness pervading everywhere, and in particular, the care which Mr. Osborn exercises himself, so far as possible, over the manufacturing work going on. Of course a man can't keep an eye to everything, but as in all successful concerns, the fertility of the brain of the head of concerns is transferred to subordinates in charge of departments. So it is here. The genins and skill of Mr. Osborn goes out in all the goods manufactured, He is a thorough mechanic and bends to the work with the same degree of spirit and determination as though it had always been smooth sailing in the good old ship of his business destiny.

The beautiful illustration on this page of the great buildings in which he is conducting his business speaks a language in regard to his thrift and enterprise better than anything the author might write. As the interested turns the pages of Newark, N. J., ILLUSTRATED, he will find art studies which for beauty of appearance and excellence of finish, ought to satisfy his longings, but among them all he will find few which speak a better or more truthful language than this, where so much mannfacturing is carried on, which tend not alone to satisfy honor and enrich the conductors, but tending at the same time toward the upbuilding of the greatness of Newark as a manufacturing centre.

To such men as Mr. Osborn then, a deep debt of gratitude is due for the good work they are doing toward maintaining, as well as the part they are playing in the upholding of a great industrial control.

NEWARK CITY COFFEE AND SPICE MILLS.

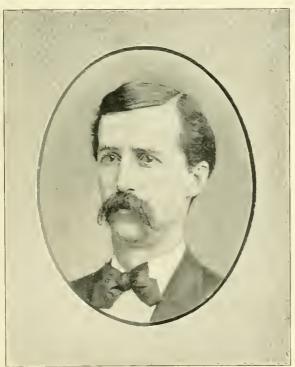
THE Newark City Coffee and Spice Mills are located at No. 55 Mechanic street. This favorably known establishment was begun April 1, 1881, in a very modest way, by the present proprietors, Messrs. David Blackwood and John Covkendall, both natives of Newark, and has been deservedly successful. None in the line of trade stands better with its patrons. The increasing business compelled them to seek larger quarters, and in 1890 they erected a handsome three-story brick building, 20x100, as shown in this illustration. It is equipped throughout with entirely new machinery of the latest improved kinds. Their coffee roasters, boiler, engine, &c., are all located on the third floor. The building is also equipped with an elevator, running from the cellar to the third floor. The capacity of the coffee roasting machinery is 6,000 pounds per day. They give employment to ten men, and do a very satisfactory business yearly. The business is entirely wholesale, and extends throughout New Jersey. The stock carried is large and full, embracing all the various grades of green coffees, teas and spices, also foreign and domestic dried fruits and nuts and grocers' sundries. We commend this house to our readers as deserving their liberal support and patronage.

EDWARD TUNISON.

NE of the most prolific business fields in the mercantile world is that of the grocer. In no other line are the demands quite so great as in those of that trade. Everybody must needs come in contact with men engaged in dispensing groceries, as all must have his commodities to a greater or less extent. So it is that he who takes up the grocers' baton and wields it honorably and manfully is certain of success. Thus in the subject of this sketch, it is plain enough, have been embodied these necessary qualifications to insure the success which is crowning his career. In the two large stores under his care at the corner of Belleville avenue and Oriental street and corner of Pacific and Walnut streets, is Mr. Edward Tunison engaged, and who shows the manner of man he is in the exact likeness on this page.

WILLIAM F. COULTER.

THE push and vim of Newark men has a demonstration in the subject of this sketch, Mr. William F. Coulter, who conducts a wonderfully successful wholesale grocery business at No. 255 Market street. In all probability there is a larger number of Newark's successful business men who have won their standing in the mercantile world by enterprise and real pluck than in any other place of its population in the country. In this great manufacturing



EDWARD TUNISON,

centre, where the hum of industry is heard on all sides. there comes up an incentive to be up and doing. The line of trade in which Mr. Coulter is engaged is one that requires determination, energy, and enterprise to achieve success. By close application to business and an industry that knows no flagging, Mr. William F. Coulter, whose likeness we show, has placed himself high up on the mercantile roll.



BLACKWOOD & COYKENDALL, NO. 55 MFCHANIC STREET.



WILLIAM F. COULTER.



FERDINAND ENDERLIN, JR.

FERDINAND ENDERLIN & SON.

THE industry of book binding, which is conducted by Messrs. Ferdinand Enderlin & Son, is one of the leading industries carried on in this city. Books bound in the city of Newark find their way into all parts of the world, and the very excellent character of the binding done here, gives this city of almost innumerable industrial pursuits the call through the nations.



W. MORRISON



FERDINAND ENDERLIN.

Many of the books printed in New York and other cities are bound in Newark. Among the leading houses conducting this industry stands that of Ferdinand Enderlin & Son, located at No. 216 Market street, in the Compton Building, where some of the very best work done in the city is performed, and from which many elegantly bound books find their way to the parlor tables and libraries throughout the land.

Few, indeed, of our citizens have the faintest idea of the magnitude of the book binding industry as carried on in this industrial centre. In no city in the country has there been such a wonderful development of the industry as can be seen in the leading book binding establishments, and none among those have given it a greater impetus than this house under consideration. The business was established in 1878, and to-day they have one of the very best plants in the city. Within the bindery of Enderlin & Son are all the very latest discovered and improved appliances and machinery known to the book binders' art. The firm consists of father and son and both are practical mechanics. Mr. Enderlin, Jr., is the business manager of the concern. Attention is called to their photographs on this page.

W. MORRISON.

FEW men engaged in business in this rapidly growing industrial centre have a wider field than those known as photographers. Away up in the attic rooms of the highest buildings along the principal thoroughfares and the busiest streets these men ply their vocation, and bring forth from the eye of the searching camera, likenesses of men, women and children. Among those artists engaged in this calling which has so much of beauty as its result, is Mr. Wilmarth Morrison, who has his studio at 177 Ferry street. Mr. Morrison is full of enterprise and is a practical mechanic as well as skilled artist and while making a business of photography in general, he makes a specialty of portrait work. Many of the photos forming the illustrations on the pages of this book are results of his skill and produced in his studio. A photographic likeness of Mr. Morrison forms one of the illustrations of this page of Newark, N. J. Illustrated.



INTERIOR VIEW OF THE AWNING AND FLAG DEPARTMENT OF JACKSON AWNING CO., NO. 186 MARKET STREET.

JACKSON AWNING CO.

THE above is a view of the awning and flag department of the Jackson Awning Co., whose factory occupies the two top floors of No. 186 Market street, this city, where over 1,000 square feet of floor room is occupied in the mannfacturing of all kinds of awnings, tents, flags, banners, signs, wagon covers, horse covers, nose bags and canvass goods of every description. The firm also does considerable work for the United States Government, having just completed a contract for 20,000 pillow cases, and now have a contract for 10,000 mosquito canopies for the Government. The company rents out tents for camping-out parties and lawn parties



J. WESLIE JACKSON.

and furnish floor crash and sidewalk canopies for weddings, receptions, etc. They do the largest business in the decorating line of any firm in the State. They have over 4,000 flags of all nations, which they use for that purpose, and can decorate for any purpose, both inside and outside, at a moment's notice. Their business is not confined to the city of Newark, but they furnish awnings and flags, also decorations, for all parts of the United States, and have shipped awnings to South America through a New York shipping house. They took the premium for the handsomest decorations on a private house in the city of Detroit, Mich., during the G. A. R. encampment in 1891. They also were highly complimented for their handsome decorations at Washington, D. C., during the encampment of 1892. The success of the business is due to the push and energy of Mr. J. Weslie Jackson, who is president and treasurer of the company, he having started the business in 1878 and built it up successfully by his energy and hard work until 1886, when the company was organized as a stock company under the State law of New Jersey, since which time Mr. Jackson has been the treasurer and principal executive officer of the company.

Mr. Jackson, whose photo is shown here, was born in Morris county, this State, and at the age of seventeen enlisted as a drummer boy in the 27th N. J. Volunteers, and returned with the regiment to Newark, where he reënlisted as corporal in the 33d N. J. Vet. Vols., and served with his regiment as color guard during the Atlanta campaign in the 2d brigade, 2d division, 20th A. corps, under Gen. Joseph Hooker. After the fall of Atlanta he was detailed for duty at corps headquarters as scout and messenger, where he remained until the fall of Richmond. He returned with his regiment to Newark, having been promoted to second lieutenant for bravery. He is a member of Lincoln Post, No. 11, G. A. R., Department of New Jersey; is a Republican in politics, but has never held office except Superintendent of Wharfs of the city of Newark for six years, while he had his factory on the dock.

ALSDORF & CO.

THE rapid growth and marvelous expansion of the business conducted by Alsdorf & Co., at No. 605 Broad street, is only another demonstration of the fact, that the man or set of men who start out with a determination to stand by the golden rule in all their transactions, are sure to win. The business of the house which is now under consideration, is three-fold in character, or consists of three branches under one head, viz: Bicycles, pianos and sewing machines. From modest beginnings indeed, did Alsdorf & Co begin the work of building up a trade, which to-day rivals any house in the State in the value of goods handled and the amount of business transacted. From the modest establishment in Academy street, just opposite the post-office, where they began the work of building up their great business, which is the pride of every Newarker who has the honor of the firm's acquintance, they moved to their present elegant and roomy quarters. Our artist has shown a wonderful degree of skill in transferring to these pages of Newark, N. J., Illus-TRATED, the several photographic views of this immense mercantile emporium. interior views which represent the front and rear of the first floor or main store and salesroom, which has a depth of 220 feet, where the hundreds of the beautiful wheels, many of which are truly gems, and some of them so inviting, there isn't much reason left when one looks and admires why they should not buy them; especially so when the terms of payment are made so easy that it don't take a very stiff purse to do the business In fact anybody who is honest enough to pay sometime needn't go on foot,

> But old and young can glide away, On the shimmering wheel so bright and gay; Can be up and off at break of day, Over the hills and so far away.

The next is a representation of the sewing machines, of an almost endless variety of styles and patterns, and occupy the rear, while those charming pianos made by Sohmer and several other makers, so sweet in tone, have their abiding in the front of the second floor. And yet there's another which demonstrates the artist's skill with full greater truthfulness, in the picture which gives a superb view of the workshop on the third

floor, where the workmen are seen, spectre-like, flitting to and fro, as they make the new, or rejuvinate the old, whether it be piano, bicycle or sewing machine, its apparently all the same to them in the picture.

On the fourth floor they maintain a riding school, where girls and boys, ladies and gentlemen, are taught to ride, free of charge.

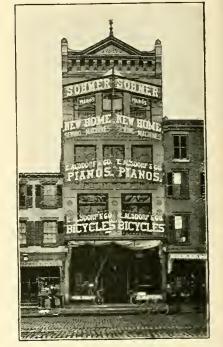
Here is another giving a correct view of the entire building or street front elevation of this Alsdorf & Co's wonderful industrial bee-hive, from which go forth daily large numbers of swift flying bieyeles and sewing machines, and upright pianos of sweet tone.

An hour or two, or even several, could not be more pleasantly, or for that matter, more profitably spent, than in a visit to this establishment of Alsdorf & Co. Could it be done when either Mr. Alsdorf or Mr. DuBois are found at leisure the visit would prove much more satisfactory, since a conductor through the infinite maze of bieyeles and sewing machines, saying nothing

about the pianos, which are here housed by the hundreds. The FRONT VIEW OF CYCLE DEPARTMENT names, makes and numbers of the wheels the visitor would most admire or might be induced to buy, can be so nicely stated and pleasantly rehearsed by either of these gentlemen, who have made them all study, and then they always study to please. They and their salesmen are so painstaking that none can go away that have paid attention to the disquisitions which they are always prepared to give on the subject of the wheel or the sewing machine as a "motor," or the piano's fine qualities, on which they love to dwell,

while the visitor looks and admires, and finally settles the fact in his or her own mind that the place to buy one of these absolute necessities for human welfare, is where they sell them the cheapest, and those that are best, and the place, right where they are, and where such evidently practical and honorable gentlemen are the chaperons and salesmen. A grand elevator earries passengers from floor to floor, and the pianos, wheels and sewing machines are taken up and down without a marr or seratch.

Early in the present wheel excitement Alsdorf & Co. caught it on the fly, (as it were) and did a great work in supplying the material for the upbuilding of this great and growing industry. Mr. DuBois is an expert 'cyclist, and is never averse to taking a spin through the country, and especially is this so when somebody is in pursuit of a wheel. He is always ready to demonstrate the extra good quality of those they have in store, and they never deal in any but the best, and everything is warranted and sold for the least possible price, either for cash or on installments, on terms so easy that none need be so poor as to be unable to buy.



PLANT OF E. ALSDORF & CO.







The marvelous facts that everybody ought to be aware of, are well understood by the firm, that the wheel is a genuine promoter of the appetite, a sure dyspeptic renovator, uric acid eliminator, muscle developer, and long life promoter, and they never tire in acting the roll of educators. If there were more Alsdorfs and DnBois, (who is a nephew of Mr. Alsdorf) who like these men, would ceaselessly endeavor to keep the people up to the work of developing the chest and strengthening the lungs by a spin on the wheel out in the fresh air, there would be far less narrow chests, hacking coughs—in short, very much less tubercular consumption. Alsdorf & Co. conferred a great boon on the ladies when they succeeded in inducing them to throw off that foolish modesty which kept them for years from adopting the habit that gentlemen so long enjoyed, and riding the bicycle wheel.

The visitor must not forget, in looking and yearning, that there is yet something for his attention. The New Home light running swift and strong sewing machines, hundreds of which the house is seeking customers for. Also elegant pianos, in the height of fashion, and for prices so low, and on terms so easy, as to be truly startling, and within the reach of every desire. To Alsdorf &

Co., then, are due the thanks of hundreds of families whose struggles have been so wonderfully mitigated through their truly benificent plan of putting excellent sewing machines into their hands on the most liberal of terms. With the outlay of a few dollars a month as a payment on one of their swift running machines, many a family has been enabled, not alone to procure this mighty helpmeet, but also benizens of comfort to household and self, to which they would have long remained strangers perhaps, had not the studious and thoughtful care of this liberal house placed them within their reach.

Then again, as if the cup of the public gratitude toward this firm was not full to the running over, they must needs, in fulfilling their grand mission, place in many a home a beautiful piano, where even the sound of sweet music had seldom heen heard before. Alsdorf & Co. had in their generous business methods made its advent certain. Not a few who have improved the opportunities offered by Alsdorf & Co., of cultivating their musical talent, are playing for the public.

It is a pleasure indeed, to refer to the life-like photos of these men, which the artist has so skillfully transferred to these pages.



EGBERT ALSDORF.



JOHANNIS A. DU BOIS.

MULLER & SCHMIDT.

It Is to say nothing derogatory of the many other great merchandizing establishments of the city of Newark engaged in the same line with the house under consideration, when the declaration is put in print which speaks in the language of merited praise due the furniture and house-furnishing goods emporium of Muller & Schmidt, situate in the elegant brick structure

extending from No. 93 to 97 inclusive, on Springfield avenue, a street which is rapidly advancing in commercial importance. These great buildings, known as the business plant, wherein is housed the immense stock in trade of this wide-awake and progressive mercantile firm, is only a leading representative house of hundreds of other similar establishments for business on this avenue. Among these are some as large and rich in merchandize as the noted stores of Broad and Market streets.

Muller & Schmidt were among the first to sow the seed of business and to reap the rich harvest of trade on Springfield avenue. The first these enterprising men scattered was but a handful, and so rich and productive did the soil of the hill region prove, that they have not only continued to add more and more to their business, but others caught the incentive to try their hand at Springfield avenue merchandizing, and while Muller & Schmidt have grown to the grand proportions of to-day, there are many more representative stores along the avenue, making it unnecessary for purchasers to go down or out

of town to procure their supplies. The result of all this has been that more room was soon demanded and greater facilities required. To meet these wants they purchased the ground and erected the elegant brick structure at Nos. 113, 115 and 117 Springfield avenue, near West street, and extending fifty-five feet in William street, and thus forming a great commercial centre on the hill.

These stores are built of brick, four stories and basement, finished in Georgia pine, and furnished throughout magnificently with every convenience for the comfort of the small army of clerks and the accommodation of customers. Hydraulic clevators ply from basement, to attic and roof. The stock of goods this house carries will vie with any in the State, and the prices

are so low, and the terms so easy, that all can come and buy. Attention is also directed to the beautiful illustration of this enterprising establishment on this page of Newark, N. J., ILLUSTRATED. Within the walls of these great structures, which are so beautifully brought out in the photo view and pen sketch here given, is found on exhibition and sale everything

necessary for housekeeping purposes. Their stock of tapestry and ordinary Brussels carpeting must needs be seen to be appreciated. Along with the carpeting comes the oil cloths in infinite variety of styles, qualities and patterns on the second floor. On the third floor are seen the extension tables and dining-room furnishing goods, much of which is so attractive, beautiful and unique as to make the on-looker hungry, not alone to eat, but buy as well, the handsome things preparatory. Here as well as on the fourth floor are seen the bed room suits, many of which are so attractive, rich and beautiful as to captivate the desire to possess at once. In the basement are stored the stoves, ranges

and heavier goods so necessary in housekeeping, while the very lightest wares find their abiding places in the attic, and far away from the lounges, so invitingly arranged along the elevator route. In order to keep everything cool, from attic to cellar, during the oppressive warm weather the house carries refrigerators of many very inviting styles and patterns.

Muller & Schmidt do

business on the grand old principles of live and let live, and believe that a "nimble sixpense is far better than a slow shilling." The comfortable and rapid electric cars of the Springfield avenue line pass the door.

The friends of progress, who are ready to exult over success achieved, will find opportunity in the presence of the great stores of Muller & Schmidt, who have solved the problem on springfield avenue. On this spot, and in the conduct of the house furnishing goods business, Muller & Schmidt have made abundantly manifest the fact that "where there's a will there's a way."

Polite, painstaking, experienced and honorable clerks and salesmen stand ready at every counter, and in every part of this great mercantile bee-hive, to attend your every beck and call.



THE ROSSNAGEL FURNITURE CO.

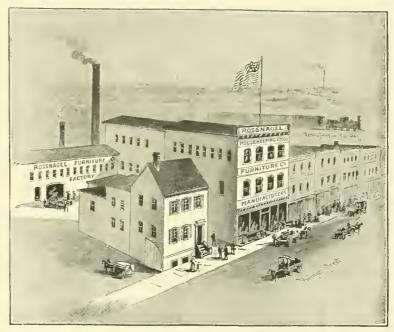
ONE of the few furniture manufacturing houses that Newark has, is the Rossnagel Furniture Co.'s plant, located at Nos. 140 and 142 Walnut street. This house was established by Mr. William Rossnagel in 1869, in a small way, and under his vigorous and excellent management grew to be one of importance.

His death occurring in 1879, his widow, Mrs. Mary A. Rossnagel, continued the business under the management of Mr. J. G. Rossnagel.

In July, 1888, the present company was formed with William D., and Walter Rossnagel as partners, who have since successfully prosecuted the business.

The store occupied is a fine double one, 30 foot wide, and running "L" shape, almost to New York avenue. Three floors are in use, making a total floor space of over 12,000 square feet.

The first and second floor, used as salesroom and offices, display medium and high-class bed room suits, parlor furniture, chairs, bedding and sideboards. The third floor is used as upholstering and bedding shops, (this is a well lighted room, giving employment to four upholsterers, two mattress makers and four cabinet makers the year round, all experienced men, and turn out first-class work). The "L" annexed is used as stock rooms. Every convenience is provided for



ROSSNAGEL FURNITURE CO., NOS. 140 AND 142 WALNUT STREET.

the business, and all prices are the lowest consistent with legitimate business. The low rents prevailing in this section, is a drawing card with this house, as it enables them to sell much cheaper than if they were on a business street. It is one of the most reliable and prompt dealing houses of the kind in the city, and customers may safely rely upon all representations made when purchasing of them. Under its present control, the business continues to increase and the reputation of the old house is ably sustained.

AMOS H. VAN HORN.



AMOS H. VAN HORN.

EW men engaged in business in Newark have earned a better right to the title of self-made men, than the conductor of the great house furnishing emporium, located at No. 73 Market street. It is but little more than a quarter of a century since Amos H. Van Horn, who had started business in a small way, heard the clarion call from the trumpet of President Lincoln to rally for the defense of the Union, left his all, enlisted and went to war. Faithfully and sincerely young Van Horn fought his way through the war and returning in safety, wears the honored badge of a veteran. On his return he at once re-opened business and by the exercise of that wise discretion and shrewd business tact, he has risen from step to step, always keeping his affairs well in hand, and ever willing to accept new and promising theories, he has gone on and on, increasing, enlarging and advancing, until the house furnishing goods establishment over which Amos H. Van Horn, the veteran soldier and successful self-made man and merchant presides, is one of the largest in the State. The manner of man Amos H. Van Horn is, can be seen in the life-like photo of him on this page.

The lots on which Mr. Van Horn conducts his business, have a frontage of fifty-one feet on Market street, extending from Nos. 69 to 73 inclusive. The buildings are four stories high and two hundred feet deep. Broad stairways extend from basement to attic and an elevator plys to all the stories carrying customers and furniture. With all the room his great buildings furnished, the mighty increase of his business called for more. First he bought opposite to his rear, on Campbell street, erected another five story building, thus occupying Nos. 23, 25, 27 and 29 on the north, and 26, 28, 30 and 32 on the south side of Campbell street. More room was the cry, till he bought through to Bank street, and built No. 85 of buff brick and blue stone, five stories, basement and attic.

THE HAGOPIAN PHOTO-ENGRAVING CO.

IN NO line of industry has greater improvements been accomplished during the last quarter of a century than in the engraving art. On this page are produced specimens engraved by the Hagopian Photo-Engraving Company, whose

VRTIST.

business is conducted at No. 3 Great Jones street. New York city. This enterprising house has produced the greater number of the finest illustrations to be found on the pages of Newark, N. J., HLUSTRATED. The head of the firm has been connected with the industry during the past twentyfive years, and is perhaps entitled to

be designated one of the pioneers in the photo-engraving business of the United States, having learned the art of engraving on wood with William W. Howland, Esq. In 1868, three years later, he assumed entire charge of the engraving department of the Actenic Company's plant, which was the first

known to produce printing plates from photos, by the J. C. Moss process. Being an artist, and expert engraver, with a thorough knowledge of photography, he studied and experimented in the processes, and was rewarded by discovering several new methods which made him an expert in the business. It was Mr. Hagopian



PHOTOGRAPHING.

who founded the American Photo-engraving Company, and during his career with them they were noted for producing the best work in the trade. After leaving the company his services were secured by the Photo engraving Company of Park Place, with whom he served ten years as superintendent of inventions



ETCHING.

and processes, and he was also identified with the wellknown house of James R. Osgood & Co., of Boston, Mass. In May, 1591, he associated himself with Mr. Albert G. Katabdjian, who is also a practical engraver with twelve years experience, and had charge of the engraving depart-



ROUTING.

nent establishment for several years, and established the present plant, which is fitted up with every known improvement tending to perfect the work, and reduce the cost of engravings, thus enabling every one so inclined to illustrate their books, papers, cat-

ment of a promi-

alogues, etc., at the least possible expense. The firm recommends their new and latest process, as the neatest, cleanest and most durable, when good matarial and workmanship are required, as well as for all-around work, over the numerous processes now in use. The firm make a specialty of producing printing plates

of the best quality on zinc and copper,

Estimates, etc., cheerfully furnished upon application to the company.

The work performed by these enterprising citizens have made a complete revolution in the engraving business, especially is this so in the immense reduction of the cost of illustrating such works as this,



ENGRAVING.

which, it is safe to say, would have been, so far as the beautiful plates are concerned, ten times what this company has been enabled to produce them for, under their late improved, scientific and artistic methods, the work accomplished being equally as good, if not better, than if it were done by the old process. A

full and satisfying demonstration of this fact can be seen by the least observant, as the pages are turned, upon each of which in all their beauty of line and perfection of detail, they are seen. If farther evidence is needed of the truthfulness of the statement of the wonderful saving the new processes of this company have achieved, the



PROOFING.

evidence which would prove convincing to the most exacting, can be had from the lips of the compiler, in the happy result of the mighty saving which these artists have made possible for him. It has been a very pleasant surprise to him in procuring material for this beautiful work, how such elegant engraving could be produced for such a small sum of money.

THE PROGRESS CLUB.

LUB life in Newark is different from that of any other city, in that it partakes so little of selfishness. It is characteristic of Newarkers, that once they realize that they are heartily enjoying something to endeavor to bring others in to share it with them. The Progress Club is undoubtedly one of the clubs that is in a flourishing condition. In the matter of thorough enjoyment it leads all the rest. The members entertain their friends in a royal manner all the year round, in the winter season giving a series of receptions and entertainments. The home of the Progress Club, which they recently purchased, is at Nos. 9 and 11 West Park street, in one of the choicest localities of the city. It is a handsome brown stone four stories and basement. In the basement are the kitchen, boiler room, storage and wine rooms, on the first floor are a large double parlor, reception room, library, dining room and ladies' retiring room. On the second floor are the main card room, director's room, secretary's office and a handsomely appointed cafe. This floor is fitted up in cherry and has hard wood floors. The billiard room and card rooms are on the third floor and on the fourth floor is the hall, used for banquets, sociables and meetings. The house is handsomely furnished, and lighted by electricity and gas. The club was organized in 1872, as the N. N. C., and the members were pledged to secreey as to the meaning of its initials. In 1887, the name "Progress Club," was adopted and became an incorporated body. The club's quarters were then at No. 882 Broad street. In 1888, the club removed to its present home. The club has a membership of about 150. The officers are Samuel Froehlich, president; Leser Lehman, vice-president; Louis Schlesinger, financial secretary; Julius Barthman, recording secretary; Louis Plaut, treasurer.

J. RENNIE SMITH.

A MONG the many successful photographers in the city of Newark, few, if indeed any, rank higher and enjoy a more liberal patronage than J. Rennie Smith, whose studio is at Nos. 727 and 729 Broad street. His is one of the largest and most imposing among the large number in the city. It occupi

most imposing among the large number in the city. It occupies the entire upper floor of the well-known Bolles Building, next door north of the post office. The extent and capacity of his exhibition room is such that his works of art are displayed most advantageously. He has been suspending portraits on the side walls and placing



J. RENNIE SMITH.



PROGRESS CLUB, WEST PARK STRIFT.

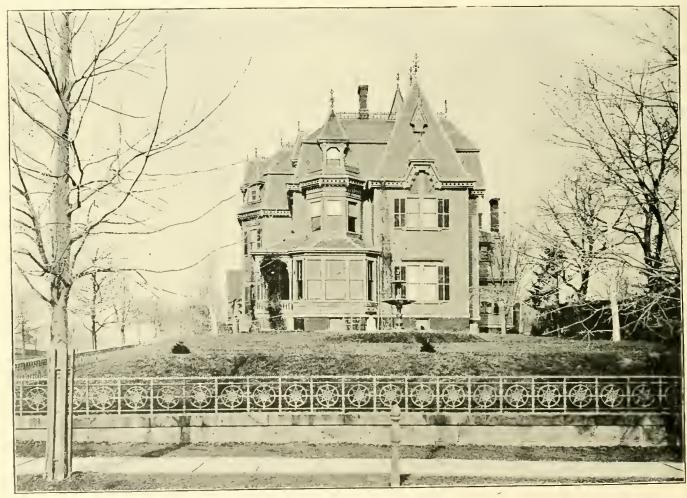
ously. He has been suspending portraits on the side walls and placing beautiful photos in show cases for a quarter of a century, of the thousands of his patrons, who have been caught in the scrutinizing gaze of the argus-eyed camera, and have passed the finishing process and through the deft fingers of the genial and large hearted artist and proprietor. Beside the remarkably correct and speaking photo likenesses of many of the people of Newark, of the present and past generations, he has many excellent portraits of well-known persons, and photos by the thousands of articles manufactured in this great industrial centre. Not a small part of his business lies in this direction of photographing many of the manufactured products of many of the great manufacturing establishments, such as trunks, saddles, harness and harness trimmings and mountings, entlery, fancy goods, sewing machines, etc. During the summer months for the past four years, Mr. Smith has conducted a photographic establishment at Asbury Park, near the easterly foot bridge connecting the twin cities of Ocean Grove and Asbury Park. This summer studio and home of the beautiful art of which J. Rennie Smith is an acknowledged master, has been extremely popular with the people, who visit these resorts. Few indeed, of the delights of these beautiful seaside places are better repaying than the photos, in group or single, obtained from a sitting before Mr. Smith's camera in his attractive studio at the Park.

Many rare samples of Artist J. Rennie Smith's suberb photos are seen on the pages of this work, as well as many of the great plants of Newark's industrial pursuits and likenesses of their conductors, all of which have been brought out with marvelous skill from pictures made by himself and other Newark artists.

ALFRED LISTER, DECEASED.

THE accompanying photograph of the late Mr. Alfred Lister, very truly represents the gentleman as he appeared during his later years. Mr. Lister was one of Newark's most prominent, highly esteemed and public spirited citizens, a representative business man and large real estate owner. He was born at Answorth, England, near the Scottish border, passing his early years working in his father's bone button factory. Arriving at manhood he came to America in 1843, locating with his father in New York city. From here the business was removed to Dobbs Ferry, N. Y., in 1849. Again another change was made to Tarrytown, N. Y., in 1851. Here the business grew so rapidly that, after marrying his only wife, with whom he lived for over thirty years, still another change was deemed advisable. His attention being ealled to the valuable factory locations on the Passaic river, this city, he purchased the site now the Lister Agricultural Chemical Works, in 1562. His brother, Edwin Lister, who had been continually with him, was taken into equal partnership. By great enterprise and indefatigable labor the firm of Lister Bros, was rapidly taking first place among the fertilizer manufacturing concerns of the world. To such an extent was the business increased that in 1885 a stock company was formed, with a eapital of \$600,000 under the style of Lister's Agricultural Chemical Works. Mr. Alfred was elected president, but served for only one year, owing to unpleasant business associations. His interest of nearly one half was invested in real estate in this city, Orange and Baltimore, Md. At one time his interest was valued at nearly one million. After a few years of this new experience, his old longing for his chosen field returned to him, causing an entire change from real estate to fertilizer business. This firm known as the H. S. Miller Co., was formed in 1888, and after a few years, in which time a very prosperous business was done, and was fast becoming a rival of the Lister's Agricultural Chemical Works; by some mis-management, a suspension of business was necessitated, and indebtedness of \$450,000 remained to be paid. There being little resource,





RESIDENCE OF ALFRED LISTER, DECEASED, MT. PROSPECT AVENUE.



VIEW ON MARKET STREET, LOOKING WEST FROM BROAD STREET.

the bulk of this was secured to creditors in the real estate by Mr. Lister's endorsements. This blow served to unsettle the mind of Mr. Lister, who, accompanied by his physician on a trip South by a coasting steamer, lost his life in the waters near the island of Cuba. His remains were brought to New York, and taken to the family plot in Tarrytown Cemetery, N. Y., by his Masonic lodge. A handsome monument, erected to the memory of this excellent man, now bears his name aloft in the beautiful grounds where he is buried. Mr. Alfred Lister was a man of great heart and sterling worth, was a man in the fullest sense of the word, strictly regarding integrity. He was well-read, having a most complete library of scientific works. Alfred Lister was, indeed, a student, and much of his success in his earlier years can be attributed to his studious habits and scientific attainments.

JOHN B THORN, DECEASED.

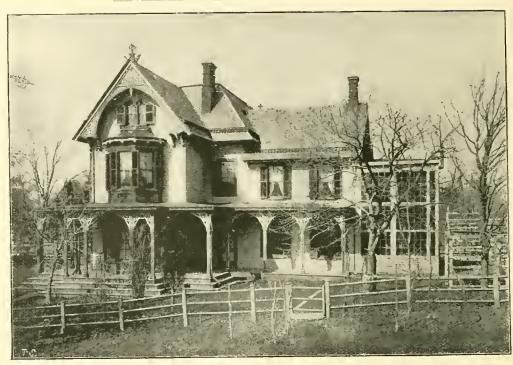
HE photo herewith given represents the late John B. Thorn, who was well and favorably known to the citizens of Newark, and especially to the members of the city's fire department, for whose honor he labored zealously during more than half a century. He was honored with every position in the department, but that of chief, and discharged the duties of the numerous stations with credit to himself and the good name of the Newark fire department. His shapeless and almost lifeless body was gently carried from the ruins of a fire at the Rubber works, one beautiful spring morning in 1857. At that time it was thought he would never return to duty, as he lingered between life and death for several days and nights, but he finally survived, although he remained a cripple with impaired health for the remainder of his life. A notable incident in this great, honest and fearless fire laddie is worthy of mention. Shortly after his return to duty he was elected by his fellow citizens to represent them in the Common Council, and upon learning that he could not hold two offices, he promptly resigned the aldermanship, with the remark, "I would rather be a fireman, than Governor of the State." Such a man needs no sermon, no monument, no lengthy obituary, his name and the memory of his noble deeds will forever remain as a beacou light in the brave hearts of the gallant fire laddies of the city.



JOHN B, THORN, DECEASED.

NEWARK FOR HOMES.

NOUGH has been already recorded in the preceding pages of this beautiful, and what we trust, will make it equally an entertaining book, yet we cannot consider the task complete until a few words shall be said as to what are the advantages Newark has to hold out as inducements for strangers to come and dwell within the city limits, or choose a domicil close by in some of her environments. As any one can see, from a glance at the beautiful pictures adorning almost every page, that in carrying out the design of the work, both the illustrations and letter press, are almost entirely confined to the manufacturing interests concentrated within her bounds. The fact, that within the corporation limits of the cosmopolitan city of Newark, there are at least two hundred thousand souls, is enough in itself to prove its elegibility for residences and that it must be a



RESIDENCE OF GEORGE A. OHL.

pretty good sort of a place to live in. While in refutation it may be answered in the language of the old axiom, "where there's so much smoke there must be some fire." that is to say where there is such a multitudinous number and variety of industries carried on and so many manufacturing establishments conducted, there must necessarily be very many opperators engaged and many mechanics employed, and where they are, there their families most assuredly be. It is an old saying and a very true one, that "industry breeds contentment," and contentment brings in return happiness, and happiness finds its richest culmination in the home and at the fireside of the mechanic and skilled workman. It may as well be added just here, that within the immediate vicinity of the city, in the suburbs proper, there are nearly a hundred thousand more people, all of whom are within the field of that influence mentioned, and sensitive to the same causes, so that which would thrill in one, will send a throb to the other. Long before the thought of her ever becoming the "Birmingham of America," had entered into the brain of any anticipator of such bright fortunes in store for

Newark, her delights as a place of residence had gone abroad on the peace-

ful wings of many a bird of promise.

One of the first things Newark has offered to strangers seeking a place of settlement for their families, is readily seen and delightfully presented



RESIDENCE OF CHARLES NOBS.



RESIDENCE OF RICHARD E. COGAN, CLINTON AVENUE.

in her almost incomparably beauty of location. Approach Newark from whatever way you will, only be the place from whence a view is first opened at such an elevation that the perspective can be so taken, that there can be a full realization of all those beautiful valleys, hills and elevations, which so charmed to their staying our early relations, as they rowed up the beautiful Passaic, amid howers of sweet and scented cedars, lining its banks and covering the meadows, and the stately oaks, the luckorys, and chestnuts, and beeches, with sugar and bird's eye maples on the hills, where they tented before the woodman's axe had felled them, and the carpenters and masons, architects and builders. had changed all into homes and the painters had painted their houses. Then, as the eye first catches the vision of beauty, always presenting like a diamond in its setting, and ever presenting so many lines and so many angles of reflection that the site is beautiful and satisfying. No stranger ever came up the

the city, geographically or commercially speaking, is at the point of their intersection. On either side of these thoroughfares are located the larger part of the public buildings and commercial houses, although extensive merchantile establishments and other large business houses may be found on many streets, crossing, intersecting or diverging; instance, Springfield avenue has many large stores and business places and leads directly to Caledonian Park, with its immense hall of festivals; Belmont avenue, with Sanger Hall; South Orange avenue, leading away westward to the power house of the swift electrics, of the Newark and South Orange Avenue Railroad Company's cars, which fly over its surface to Vailsburg, so named in honor of Dr. Vail, the editor, and where he grows his famous "King of the North" strawberries, and to South Orange. Washington street, crossing Market street. near the Court House, and near by on its westerly side is Jacobs' Theatre, while a little father South is located Stetson's Grand



VIEW ON BROAD STREET, LOOKING NORTH FROM MARKET STREET.

beautiful Passaic by row boat, raft, tug or steamer, without having the pleasantest of sensations, and, as thousands have before landing, decided to make Newark their home, just from the beautiful sighting, with outwaiting to survey her broad and beautiful streets, or the many public resorts or business places so inviting. By rail they can come from almost any direction, north, south, east, west, or any other point of the compass and to any of the handsome depots. To every part of the city and its environs, ply every few minutes, cars, the majority of which are handsome and comfortable and propelled by electricity. It is no venture to make the assertion that few cities have a more perfect system of communication, or which are better managed and conducted. For the small sum of five cents a ride can be had over nearly the entire system, so generous are the transfers made use of. The major part of the streets are wide and regular with shade trees in abundance.

Market and Broad are the main arteries, and the main centre of

Opera House, where was held, and in the large building adjoining, the industrial exhibition of 1872. On this street runs the Rapid Transit electric cars. While there are many other streets of importance, space will not permit their particular mention. On Market street, easterly, are a large number of the newspaper offices, Miner's Theatre and the Pennsylvauia railroad depot. On Market street, westerly, are several newspaper offices, German and English, as well as many handsome stores and other business places. Southerly on Broad and on its westerly side is located the "Clothing row," and great ready made clothing and merchant tailoring establishments, which have made Newark famous the world over, for the elegance and stylishness of her clothing and the marvelous excellence of their quality.

A few hundred feet southerly, at the intersection of William street is found the City Hall, where His Honor the Mayor presides, and where the city fathers hold their monthly councils and legislate for the city. Directly in the rear of the City Hall, is

located on William street, Police Headquarters, where Superintendent Brown and Chief of Detectives Hopper, with their very excellent and efficient corps of officers and policemen, keep watch and guard over the city, and answer for their work to the Board of Police Commissioners. Results plainly show, and the peace and the quiet of the city prove. that we have wonderfully efficient guardians. On the opposite, but a little to the north debauches the Central Railroad, depositing its passengers and freight right in the heart of the city. Nearly opposite are the fire laddies houses, with fires ready lit in their steamers to be off and



RESIDENCE OF ANDREW ALBRIGHT, HIGH STREET.

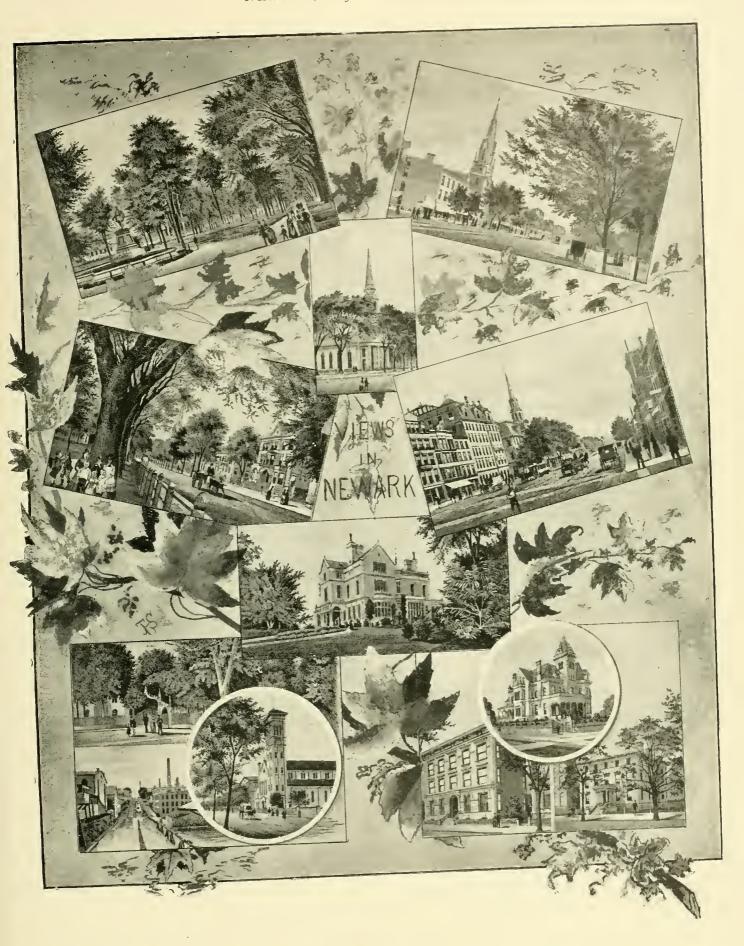
away at the tap of the bell. A little to the north, where this great boulevard, with a width, for full three miles, of a hundred and twenty feet, and paved throughout with elegant blocks of granite, as it is crossed by Market street, which is the centre of the city, and on the westerly side is seen the Prudential Insurance building towering away heavenward to nearly twenty stories high, and a little further on Uncle Sam's long delayed post office. Just over the way is the people's main stay for their tables, Centre Market. Just there lies spread out in broad acres, tree crowned and grass verdured, the Military Park of the fathers. Here beneath the fragrant shade of the friendly old elms and lovely maples, gather the children in the hot summer days to rollic and run and to skip and play, while the statue of the heroic Phil Kearney looks down approvingly from its foundation of brown stone from the hill side quarries near by. A little to the north is Washington Park, which enjoys the honor of holding the statue erected in memory of the genius, inventor and finished mechanic, the aproned monarch, Seth Boyden. About a mile to the south is another of those health storing enclosures and breathing places of the people, called Lincoln Park, so named in honor of the Martyred President



RESIDENCE OF ADAM GLUTTING, SOUTH ORANGE AVENUE AND BRUCE STREET.

Abraham Lincoln. All around the parks have our citizens erected their domicils. Just below Lincoln Park, and where Broad street's continuation, Clinton avenue, leads on through scenes of beauty to Irvington and Hilton, the latter made famous as the place where Seth Boyden cultivated the luscions Seedling strawberries, we now looked through the beautiful High street with its interlocking trees.

We might dwell on the rich gardens of the "Neck," and other surrounding regions, and take a ride on the swift electric cars out among the environments and along the ever beautiful Orange Mountains and amid the æsthetic Oranges and climb to Eagle Rock for a few moments to revel amid the landscape scenes more beautiful than anything this side the old Rocky's. But we haven't the space to say more, than a word as to the Pequannock mountain spring water running free through the city, bringing cleanliness and healthfulness to all who will claim it; of the grandeur of its public schools with education freer than water, with teachers deep learned, always ready to present it; of the beautiful churches and eloquent preachers, freely dispensing the word of the Lord. As we close this brief rehearsal of incentives held out by the city of Newark, and its environments that strangers can come and build homes with a promise of comfort, health and longevity, it does not require the eye of a prophet to see built upon the soil of Essex county the great city of the future.



PAST MAYORS OF NEWARK.

O HISTORY can be more truthful or beautiful than that which shines forth from the face or faces of, or is found pinned upon the sleeves of those men who have stood at the helm at the head of the governmental affairs of a great city. That the readers of NEWARK, N. J., HLISTRATED may have the benefit of the results flowing from such a source, and that they may have every opportunity of studying this source of historical truth, we have transferred to these pages correct and

speaking photographic likenesses of all the mayors that Newark has had since she became an incorporated city. The sturdy yeomanry of the young town had her foundations laid deep in the rich soil where virtue predominates, and cemented the walls of her superstructure in truth and honor. From the beginning Newark had the blessings of a citizenship, the mass of whom worshipped at the shrine of the golden rule, and the majority were students of the beatitudes. When the town had grown to man's estate, and the good judgment of her citizens realized the necessity of a stronger and better government, and they had decided to have an act of incorporation and a city government established, it was no hard task to find among her citizenship a man eminently qualified to take the helm of the young city, and stand at the head of her municipal affairs.

The choice finally fell to the lot of Honorable William Halsey, who had come down to Newark from the historic region of Short Hills, where he was born in March, 1770, to make his fortune as other honorable members of the family came from about Springfield, near by, where the old church still stands, from the pews of which the heroic Pastor Caldwell gathered the hymn books for the patriots to use for wadding in firing the shots to heat back Britain's hosts and sounding the toesin of liberty to the world. William Halsey was elected mayor in April, 1836, and filled the office acceptably for one year.

The second man chosen for mayor by the people bears a name honored everywhere, Theodore Frelinghuysen. His election to the mayorality occurred in the spring of 1837. He too had came up from the country and settled in Newark, earning fame and fortune. This great and good man will be best remembered as the Whig candidate for vice-president of the United States, on the ticket with the illustrions Henry Clay. He served two terms.

Major General Miller took up the baton of the mayorality when Theodore Frelinghuysen laid it down, this was in 1839, and he was also elected in 1848. Gen. Miller was born in New York City. He died in 1856, leaving a name honored and respected.

The next and fourth in the mayorality succession, was Oliver H. Halstead, a scholarly gentleman, who afterward was honored as chancellor of the State of New Jersey. Ex-Mayor Halsted was elected in 1840, and served one term. He was a Jerseyman, his birth place being Elizabeth.

Next in the line came William Wright, who was elected to the office and became mayor of Newark in 1841, the fifth in the line of the mayorality succession, Mr. Wright served three terms, being re-elected in 1842 and 1843. He was made governor of his adopted State and represented New Jersey in the United States senate.

The sixth Mayor of Newark in the person of Stephen Dodd, was elected in 1844, and served one year. Stephen Dodd was born at Mendham, March 7, 1770, and lived to the ripe old age of 85, and passing away on the 25th of March, 1855.

Next came Col. Isaac Baldwin, who was elected the seventh mayor, in 1845, and served one term. He was born in 1780, and died in 1853.

Now came a man who left the impress or his genius on all he

tonched. He was the eighth mayor of the city in the line of succession. Was a Newarker by birth, born in 1808, and was elected mayor of his native city, in 1846, and died in 1884. Beach Vanderpool was honored and respected by all who knew him.

James M. Quimby, who was a representative carriage and coach manufacturer, was the ninth in succession of the mayorality. Mr. Quimby was born in Orange, in 1804, was elected mayor 1851, and died in 1874. He served three terms.

Next in order comes the name of Horace J. Poinier. He was born in Newark in 1810, was elected as the tenth mayor in 1854, and served three terms. Mr. Poinier is still going in and out among the people beloved by all.

For seven years Moses Bigelow served the people of Newark as mayor, being the eleventh in succession. He was first elected in 1857, and died in 1877. Moses Bigelow was a manufacturer, and carried on the varnish business for many years.

The twelfth in the line of succession of the mayorality, is Major General Theodore Runyon, who was elected in 1874, and served one term of two years. General Runyon was born in 1822, is a lawyer by profession and was chancellor of his native State for fourteen years. Gen. Runyon commanded a division in which was included the New Jersey Brigade at the first battle of Bull Run in the beginning of the war. The general is still actively engaged in practising his profession.

Thomas B. Peddie, Newark's thirteenth mayor was an extensive manufacturer, and while alive conducted the immense trunk industry at Market and Halsey streets. He was elected mayor in 1865, and served two terms. He was born in Edinboro, Scotland. Mayor Peddie was active in politics and became a member of the State legislature and also of the congress of the United States. Mr. Peddie contributed liberally of his large fortune to the support of the Baptist Church and its schools while he lived, and when he died endowed the Memorial Church, which bears his name, also the Peddie Institute named in his honor at Hightstown.

Newark city did herself a lasting honor by electing Frederick W. Ricord mayor in 1869, and duplicated the same by his re-election, 1871. He was the fourteenth of the line in the mayorality succession. He was sheriff of Essex county and lay judge of the court. He is at present librarian of the State Historical Society.

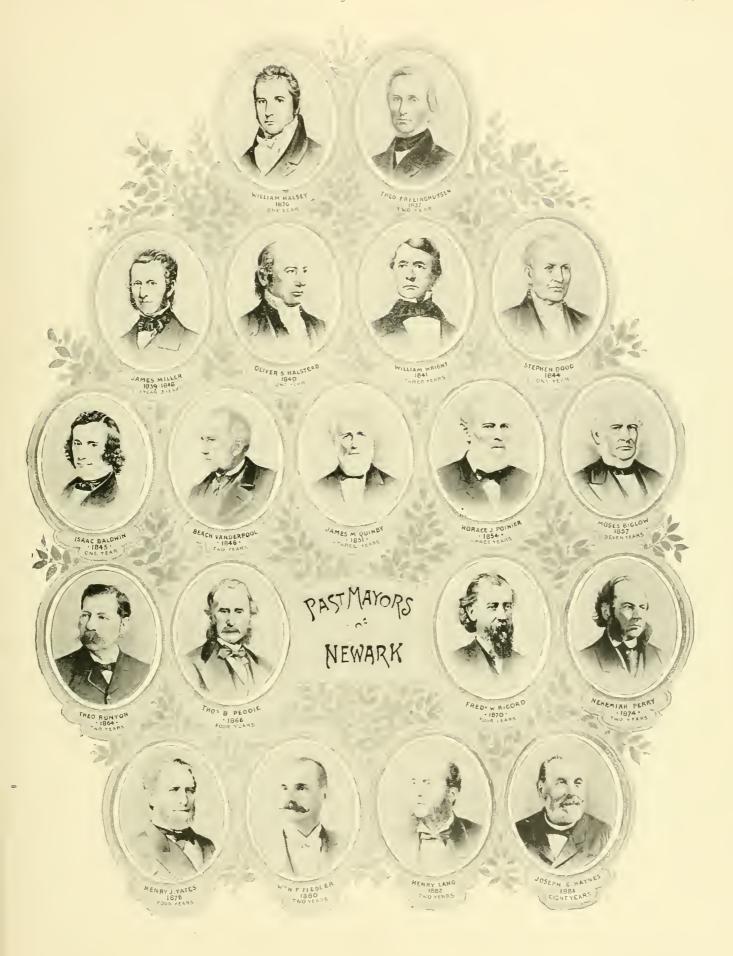
Nehemiah Perry was elected in 1873, being the fifteenth of her mayors. He served one term of two years. He also represented his district in congress, and was interested in manufactures.

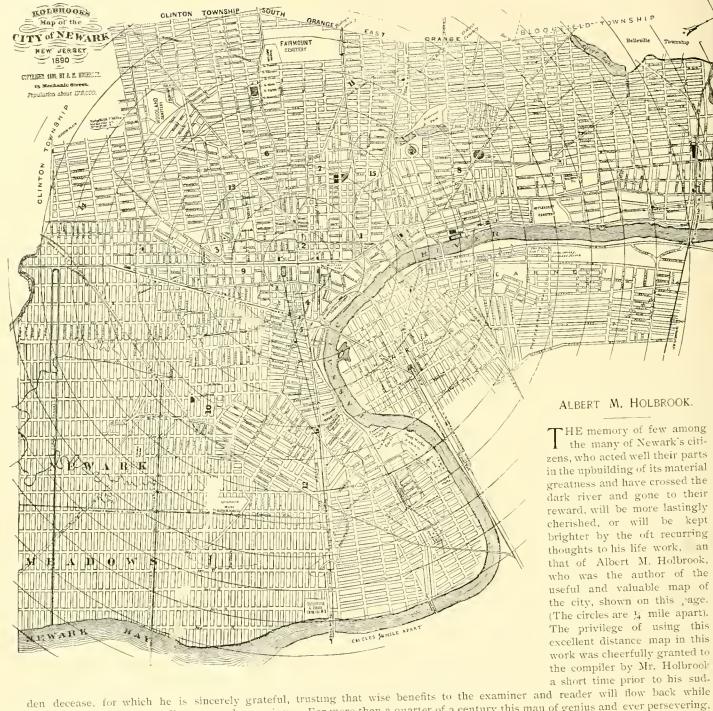
The sixteenth of the mayors of the city of Newark was Henry J. Yates, a large and successful hat manufacturer. He was elected in 1875, and served two terms, four years. Ex-Mayor Yates is yet actively engaged in business.

William H. F. Fiedler was elected to the mayorality in 1879, and served one term. He was the seventeenth in the line. Mr. Fiedler represented his district in the State legislature and Essex county in the Congress of the United States, and was postmaster during President Cleveland's first term.

Henry Lang, the eighteenth of Newark's mayors, was born in Scotland, 1829, and was elected mayor in 1881. He served one term of two years and retired. He is largely interested in the tanning industry. Henry Lang beside being mayor, filled the office of alderman most acceptably for several years.

The nineteenth mayor of Newark and present incumbent, Joseph E. Haynes, was elected in 1883, and has been re-elected four times by majorities which demonstate his popularity and the stronghold he has upon the confidence and affections of the people. Before his elevation to the mayorality, Joseph E. Haynes was principal of the Thirteenth Ward Public School, and had so popularized himself with his pupils that they parted with him with great reluctance.





den decease, for which he is sincerely grateful, trusting that wise benefits to the examiner and reader will flow back while referring to it for locations, distances and occurrings. For more than a quarter of a century this man of genius and ever persevering, wrought out year by year a directory for the city. He was one of the few who saw through the mists of the future, looming up in its coming, the industrial greatness of Newark.

History tells us that this great industrial centre, where the princely man had planted his home-tree had earlier been christened the "Birmingham of America," but its full culmination and sure realization came not until Albert M. Holbrook conceived the grand idea which bore rich fruit in the Industrial Exhibition of 1872. With an utter abnegation of self, and knowing no such word as fail, he called other spirits, with equal ardor to his assistance, and together they pushed on the work to its brilliant success. When the great e: nibition had closed its doors, to keep the fires that he had lit burning brightly, he fixed his hope on the Board of Trade. He loved this institution dearly, not for reasons which were selfish, but because of the good it was constantly evolving, "Present!" was the response from his lips at all of its meetings.

With this brief tribute to Albert M. Holbrook, who gave encouragement to the compiler of this work in the beginning, Newark, N. . Illustrated reaches the end.

